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ABSTRACT

This paper reports on part one of a study that examined the effectiveness of the Drug Abuse Resistance Education (DARE) Program as a drug resistance, violence avoidance program in West Vancouver, Canada schools. Attitudes toward DARE held by students, teachers, and parents of children in the program were examined in order to evaluate how DARE was received by those most directly involved in the program. Questionnaires were completed by students currently involved in the program (n=1,232) and students who had participated in the program at an earlier time (n=672), teachers of the DARE program (n=36), and parents of DARE students (n=422). Analyses of the questionnaires imply a general overall acceptance of DARE as a drug resistance and violence avoidance program. All subject groups acknowledged that such a program was necessary, and that there was strong support for DARE's continuance in West Vancouver schools. Acceptance of DARE's objectives, content, teaching strategies, and materials varied by group. DARE has a positive effect on students' attitudes toward the police. Findings are discussed as to their place within the context of the research literature. A review of literature related to other evaluations of the DARE program is also discussed. The following appendixes are included: Appendix A (Core: 5th/6th Grade Curriculum); Appendix B (Middle School/Junior High: 7th/8th Grade Curriculum); and Appendix C (The Questionnaires, Letter of Transmittal). (Contains 20 tables, 15 figures, and 62 references.) (MKA)

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ED 440 324

THE EFFICACY OF THE DRUG ABUSE RESISTANCE EDUCATION PROGRAM (DARE) IN WEST VANCOUVER SCHOOLS

Part 1

Attitudes Toward DARE: An Examination of Opinions, Preferences, and Perceptions of Students, Teachers, and Parents

Submitted To

MR. GRANT CHURCHILL, CHIEF CONSTABLE
WEST VANCOUVER POLICE DEPARTMENT

November 1999

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Part 1

Attitudes Toward DARE: An Examination of Opinions, Preferences, and Perceptions of Students, Teachers, and Parents

Charles K. Curtis

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CHAPTER 1

INTRODUCTION

The Drug Abuse Resistance Education (DARE) program was introduced into West Vancouver schools (School District 45) in September 1995. Since that time, almost 3,000 elementary and middle school students have been graduated from the program. In April 2000, DARE will be extended to include high school students. During the school year 1998-1999, one sergeant, one corporal, and four police constables of the West Vancouver Police Department (WVPD) were assigned to DARE classrooms.

Maintaining DARE in West Vancouver schools requires the commitment both of significant resources on the part of the Police Department and a large number of classroom hours on the part of the School District, and although acceptance of the program by students, teachers, and parents is perceived by the WVPD to be generally positive, attitudes toward DARE have never been formally assessed. Moreover, the effectiveness of the content and strategies for teaching the knowledge, skills, attitudes, and behaviors that are the objectives of DARE have not been empirically examined in West Vancouver schools.

A number of studies in which researchers attempted to examine the efficacy of DARE have been reported in the literature. A review of this literature, however, yielded inconclusive results. While for the most part these studies provided evidence to support DARE, various researchers have raised significant questions about the quality of some studies and, therefore, the degree to which their findings were valid. Furthermore, several long-term studies yielded findings that suggested that the effectiveness of DARE might be short-lived.

Most research studies of DARE were conducted in communities dissimilar from West Vancouver, and in only a single study were Canadian children the subjects. Studies conducted in Canadian schools would contribute significantly to the generalizability of the DARE research, and a study conducted in schools in West Vancouver could provide information that would assist in future decisions to continue with the program in its present form.

The purpose of this study is, then, to examine the effectiveness of DARE as a drug-resistance, violence-avoidance program in West Vancouver schools. The overall study consists of two parts. In the first part, attitudes toward DARE held by students, teachers, and parents of children in the program were examined in order to evaluate how DARE was received by those most directly involved in the program. In the second part, an experimental model will be utilized to assess the effectiveness of the DARE curriculum for teaching the cognitive, affective, and behavioral outcomes that are identified in the DARE literature as objectives of the program. The first part of the study, Part 1, is reported here.

CHAPTER 2

THE DRUG ABUSE RESISTANCE EDUCATION PROGRAM (DARE)

The DARE program, inaugurated in Los Angeles schools in 1983, was a cooperative effort of the Los Angeles Police Department and the Los Angeles Unified School District. It was a response to a growing public concern about the proliferation of drug and alcohol use among adolescents. Since its introduction, it has been implemented in 75% of the school districts in the United States and in schools in more than 44 countries. Presently, students in several Canadian provinces receive instruction in DARE classes. DARE Canada, a federally registered non-profit chapter organization of DARE International, was formed in 1995.

The DARE curriculum has three components: the Core Program (Grade 5/6), the Junior High or Middle School Program (Grade 7), and the High School Program (Grade 9/10). Each component has a set of prepared lessons and materials that are presented by an especially trained uniformed police officer.

The Core Program consists of 17 60-minute lessons designed to provide students with the attitudes, skills, and knowledge that will assist them to resist social pressures to use drugs, including alcohol, and to resolve or manage potentially violent situations. Additionally, teaching strategies such as cooperative learning and role-playing are intended to develop decision-making and interpersonal and communications skills, enhance self-esteem, and encourage assertiveness. An outline of the Core Program is found in Appendix A.

The Middle School Program consists of ten one-period lessons in which students are instructed in the negative consequences of drug and alcohol use, examine societal pressures that promote drug and alcohol use, and learn strategies for resolving conflicts without violence and for avoiding gang membership and activities. Moreover, the program introduces students to the human need for affection, belonging, and respect, and it endeavors to promote the acceptance of human diversity. Students also consider standards for legal and moral behavior. An outline of the Middle School Program is found in Appendix B.

The High School Program consists of ten lessons taught by a uniformed DARE instructor assisted by the classroom teacher. The lessons reiterate the content of the prior programs within the context of situations commonly faced by high school students. This program has not yet been taught in West Vancouver schools and, therefore, was not an aspect of the study reported in Part 1.

According to members of DARE's Scientific Advisory Board, the content and teaching strategies utilized in the DARE curriculum are grounded in social influence theory. Based on this theory, the Board postulates that knowledge and attitude about illicit drugs are not sufficient to deter drug use; self-esteem, assertiveness, the competence to defend one's position, and the capability of resisting peer pressure all play a role in a person's ability to avoid drugs. Concern for the development of each of these attributes, the Board members contend, underlaid the development of each of the Core, Middle School, and High School Programs (*The DARE Scientific Advisory*

Board, no date). Furthermore, DARE documents maintain that the DARE curriculum satisfies all the criteria proposed by the National Institute on Drug Abuse as being requisite for an effective drug-prevention program (*How DARE Compares*, 1977).

Research on DARE

Arguments justifying the DARE curriculum can be found in documents available from DARE America's web site (*www.dare-america.com*). For example, in a paper (no date) entitled, *Studies show support for, effectiveness of DARE program*, it is stated that not only does DARE enjoy "widespread popularity," but the research "indicates that DARE is effective in preventing/decreasing drug abuse among young people...." In another document, prepared by the Scientific Advisory Board of DARE America, the claim is made that research findings suggest that DARE "promotes positive behaviors, with positive effects retained for at least a year..." and that studies have clearly shown that when DARE students are compared with non-DARE students there are significant differences in favor of the DARE students "in terms of their drug use and gang involvement" (*The DARE Scientific Advisory Board*, no date).

Claims such as the above are not easy to substantiate. The extent to which an intervention reduces drug use or gang membership and violence is difficult to assess over even a few short years. The variables that are related to these activities are complex and difficult to measure or even identify over long periods of time. In many DARE studies, assessments took place just after the programs were completed.

The literature search revealed 42 studies in which DARE outcomes were examined. These consisted of a meta-analysis, 14 descriptive studies utilizing questionnaires administered when the program was completed, and 27 reports of research intended to determine the effects of DARE on variables such as drug use and attitudes toward drugs. The most frequently reported research design in the latter group was the nonequivalent control group design (16), with control groups selected from whatever sources were available. The one-group pretest-posttest design was employed in 6 studies. Other designs included the time series design (4) and the Solomon four-group design (1). Most studies employing quasi-experimental designs were conducted prior to 1994, perhaps because DARE was less widely taught than at present and groups who had not been exposed to DARE were still available. Because these studies have been reviewed a number of times in the literature (see, e.g., Dukes, Stein, & Ullman, 1997; Minnesota Institute of Public Health, 1997), only a summary of their findings is presented here. (The studies are identified in the reference list at the conclusion of the report.)

A number of patterns emerged from the findings of surveys and comparative studies where assessments were conducted in the same school term as the DARE program. Probably the most consistent finding pertained to acceptance of DARE: In almost every case where students, parents, teachers, and administrators were asked their opinion of DARE, the responses were very strong in favor of the program. Almost as frequently reported as support for DARE was the finding that DARE was successful in providing students with knowledge about drugs and the consequences of illicit drug use. DARE seemed to be equally successful in inculcating anti-drug and anti-gang/violence attitudes. And, students who received instruction in the DARE program tended to have more positive attitudes toward the police and law enforcement than students who had not had DARE.

The effects of DARE on drug use and self-esteem were less clear. In the majority of studies where drug use was examined, researchers concluded that the DARE program either had little or no effect on drug use or that the negative effect was short-lived. Conclusions in this area were confounded by findings that, following DARE, students in a few studies reduced their use of some drugs but continued their use of others. Additionally, several studies revealed that pre-DARE drug use levels were maintained in experimental classes following DARE instruction but increased in control classes, making it difficult to reach a clear conclusion. Furthermore, in seven studies the researchers reported significant increases in knowledge of drug use and anti-drug attitudes in the students in the DARE group, yet they found either no difference between these students' and control students' drug use, or, when the difference favored experimental students it was only temporary. The findings on self-esteem were equally as ambiguous: the number of studies reporting significant increases in self-esteem was only slightly larger than the number reporting no difference.

The relevance of studies conducted prior to the 1994 revisions to DARE, which included greater emphasis on interactive and cooperative learning strategies, raises a significant question about the appropriateness of their findings to the DARE program presently taught in schools. It seems reasonable to suggest that the patterns pertaining to program acceptance, knowledge and anti-drug attitudes, and students' opinion of police officers would be positively affected by the introduction of teaching strategies designed to make the program more interactive. It is interesting to note, however, that the two studies that examined self-esteem, an attribute that might be enhanced by interactive strategies, conducted after the introduction of the 1994 revisions, reported no statistically significant difference between the experimental and control groups on this variable.

Studies employing assessments one to several years after completion of the DARE program have been reported also in the literature. These studies are discussed here individually because they represent attempts to assess longer-lasting, rather than immediate, effects of DARE instruction.

Referred to as a "follow-up" evaluation, the Hawaii State Department of Education's (1989) study of 7th-grade students in Honolulu two years after completion of the DARE program is the earliest of the studies in this group. Three instruments were purported to assess alcohol, drug use, and risk of drug and alcohol involvement. The latter instrument measured exposure to family or peer use of alcohol and drugs, arrest history, and school failure. No differences were found on the mean scores of these instruments between students who had completed DARE in Grade 5 and students who had not had DARE. The study did reveal, however, that drug and alcohol use was related to the socio-economic status (SES) of the students, with low SES students reporting significantly greater use.

Ennet, Rosenbaum, Flewelling, Bieler, Ringwalt, and Bailey (1994) reported evaluations of the DARE program in a convenience sample of 18 pairs of matched schools in Illinois. Drug, alcohol, and cigarette use; attitude toward their use; perceived media influences; self-esteem; assertiveness; and peer-resistance skills were assessed immediately after the program was completed, one year later, and two years later. During the immediate evaluation, Dare was found to have a negative effect on cigarette use only, and this effect was not maintained in succeeding assessments. Additionaliy, an initial difference in self-esteem which favored the DARE students was not found a year later. A high attrition rate (26%) posed a threat to the validity of the study's findings. This study is also reported in Rosenbaum, Flewelling, Bailey, Ringwalt, and Wilkinson (1994).

McNeal and Hansen's (1995) three-year study utilized a complex design to collect data from multiple cohorts on drug use and illegal behaviors (e.g., selling drugs, driving after drinking) related to drug use. The findings revealed that when DARE and non-DARE students were compared or analyzed by grade level and school, DARE had no significant effect on drug usage or illegal behaviors; however, when the data were organized and analyzed by combining student-centered and school-centered categories and examining the outcomes in a nested design, DARE students used significantly less alcohol, smoked less, but used inhalants more than non-

DARE students. These perplexing results led the researchers to conclude the DARE program had "not demonstrated effectiveness worthy of its widespread promotion…."

Nyre, Rose, and Bolis (1990), Wysong, Aniiskiewicz, and Wright (1994), and Clayton, Cattarello, and Johnstone (1996) reported studies of follow-ups conducted after a period of five years. The earliest such study, by The Evaluation and Training Institute (Nyre, Rose, & Bolis), followed DARE and non-DARE students from 6th-grade through junior high school. During the five-year period of the study, while drug and alcohol use increased in both groups, DARE students reported significantly fewer incidents. Moreover, the DARE students as a group held more negative attitudes toward drug use and more positive attitudes toward law enforcement than did the group of non-DARE students. School records disclosed that DARE students had fewer discipline and behavioral problems than non-DARE students. However, attrition rates in both DARE and non-DARE groups were high, posing a serious threat to any interpretation of the results.

In the study by Wysong, Aniskiewicz, and Wright (1994), 12th-grade students who had received DARE instruction in Grade 7 were compared with 12th-grade students from the previous year who had not experienced the DARE program. The instrumentation program consisted of measures designed to assess drug knowledge, anti-drug attitudes, drug-resistant coping skills, self-esteem, and locus of control. No significant difference between the mean scores of two groups on any of these measures was obtained. The five-year study reported by Clayton, Cattarello, and Johnstone

(1996) yielded similar results. Even though posttests' differences on measures of attitudes toward drugs, drug use, and capability to resist drugs, administered immediately after the DARE program was completed in Grade 6, were statistically significant in favor of the DARE students, no such differences occurred in subsequent administrations. The findings of this study are confounded by the fact that the non-DARE comparison group had studied a drug education unit as part of the health curriculum.

Long-term studies conducted in schools in Colorado Springs produced findings that suggested the possibility of both sleeper and gender effects for DARE instruction. Instruments designed to assess self-esteem, multi-drug use, onset of drug experimentation, drug attitudes, acceptance of police, resistance to peer pressure, and family bonds were administered to students in Grade 9 and the scores were grouped and analyzed according to whether students had received or not received DARE in Grade 5 or 6. (Dukes, Ullman, & Stein, 1996). No statistically significant differences were identified by the analyses. The researchers concluded that, although it was possible that additional drug education in junior high school that would have been received by both DARE and non-DARE students might have mitigated any differences between the two groups by Grade 9, it was also possible that maturation effects as students move into adolescence might "operate in a direction opposite to the tenets of D.A.R.E." Three years later, in the 12th-grade, the students were assessed again (Dukes, Stein, & Ullman, 1997). This time a difference was found between the two groups, but only for male students. Illegal, deviant drug use (such as amphetamines/barbiturates, cocaine, LSD and inhalants) among DARE males was significantly less than among non-DARE males.

The long-term effects of the DARE Core Program were examined in a study (Rosenbaum & Hanson, 1997) in which students' drug use attitudes, beliefs, and behaviors were assessed annually over a period of six years, from 1990 to 1996, with a survey instrument which was purported to assess drug use, perceptions of the media's influences on smoking and beer drinking, self-esteem, attitudes toward police, peer resistance skills, onset of alcohol use, and attitudes toward drugs, among others. With the exception of peer resistance skills and perceptions of media influences, initial differences on these variables, which had favored the DARE students, had mostly disappeared by junior high school. Moreover, within the DARE group, peer resistance skills and perceptions of media influences were much stronger among urban and rural students than among suburban students. Interestingly, the analysis revealed that students in the non-DARE group who were exposed to higher cumulative levels of supplemental drug education (but not DARE) held more positive attitudes toward drug usage, saw more benefits in alcohol and cigarette use, and acknowledged weaker peer resistance skills. Furthermore, these students reported higher uses of drugs and alcohol. Students in the DARE group, on the other hand, did not seem to be affected by additional instruction in drug education. The researchers concluded that DARE appeared to "negate the potentially counterproductive effects of other drug education programs."

A study that receives special attention here is the 1995 study conducted in Ohio by Donnermeyer and his colleagues (Donnermeyer, no date; Donnermeyer & Davis, 1998; and Donnermeyer & Phillips, no date). Presently, the findings of this study appear to be the most frequently quoted in DARE's repertoire of support literature. Donnermeyer and Phillips' analysis of over 3,000 11th-grade students suggested that students who had received one or more DARE programs were much more likely to be classified as *low risk* (students who had never or rarely used drugs or alcohol) than students who had not had been in DARE programs. Furthermore, fewer students with one DARE or multiple DARE programs were classified as *moderate* or *high risk* than students without DARE. Additionally, more DARE students than non-DARE students reported that they would resist friends' offers of alcohol or marijuana, had fewer friends who would encourage them to drink or use marijuana, and had more friends who would stop them from drinking alcohol or using marijuana. And, DARE students scored higher on items assessing their opinions of police than non-DARE students. Donnerymeyer and Phillips stated that the findings of their study indicated that "D.A.R.E. does make a positive difference." Data from the same study were used by Donnermeyer and Davis to conclude that students who had participated in more than one DARE program were at less risk than those who had had only one, especially if that single program had been the Middle School or High School program. Students who had had all three DARE programs scored the lowest mean for drug involvement, implying the benefits of the total DARE program over any one aspect of the program.

The final study reviewed here is a meta-analysis conducted by Ennett, Tobler, Ringwalt, and Flewelling (1994). This approach was first proposed by Glass (1976) as a means for conducting high quality integrative reviews. Simply speaking, in conducting a meta-analysis, the reviewer locates all studies on the defined topic that meet criteria for inclusion in the review. The findings of each study are converted to a common metric, an effect size, that permits comparisons between or among treatments, sample attributes, dependent measures, and so forth. Although conventions for judging the significance of effect sizes are not formally fixed, Cohen (1977) suggested that .20 is a small effect size, .50 a medium effect size, and .80 a large effect size. The criteria for selection in the Ennett *et al.* review were rigorous (e.g., a study had to have a control or comparison group, quasi-experimental studies had to control for initial differences, pretest-posttest and posttest-only studies had to use random assignment) and only 8 of the 18 DARE studies they located were selected. Effect sizes were calculated for each of six outcomes. Mean effect sizes for each outcome were the following: knowledge (.42), attitudes toward drugs (.11), social skills (.19), self-esteem (.06), police (.13), and drug use (.06). The effect sizes for all but drug use were statistically significant. However, with the exception of knowledge, none of mean effect sizes in their review reached .20, the criterion for a small effect size. Moreover, the reviewers compared the effect sizes for knowledge, attitudes, social skills, and drug use with those reported in a prior meta-analysis by Tobler (1986) of 143 adolescent drug prevention programs and found that they were higher than the effect sizes Tobler calculated for non-interactive programs (except for drug use) but lower than those for interactive programs. It is interesting to note, that effects sizes for non-interactive programs failed to reach the .20 (small) criterion on any of the four categories, while in only two categories (knowledge and social skills) did the effect sizes for the interactive studies reach or exceed the .50 (medium) criterion, with small effect sizes for attitudes (.33) and drug use (.18). The authors advised that comparisons with Tobler's findings should be considered with caution, suggesting that many of the control groups both in Tobler's study and theirs might not be 'pure 'no treatment' groups" and research has shown that effect sizes are lower when control groups receive some form of treatment. Additionally, they suggested that while DARE was a "commercially available" curriculum, most of the studies in Tobler's review were university-based evaluation studies and therefore the "intensity of effort" in these studies might be greater than in the DARE programs described in the studies they examined. The authors stated that since only the effects of the Core Program had been compared in the studies in their review, the findings should not be generalized to the Middle School or High School Programs, nor would they apply to the cumulative effects of the three DARE programs. The validity of these findings for the revised 1994 DARE program is also in question. As mentioned earlier, strategies included in this revision were designed to provide a more interactive approach and, as Tobler concluded, interactive approaches to drug education produced greater effect sizes than non-interactive approaches.

Summary

Since its introduction into Los Angeles schools in 1983, DARE has been the subject of a number of studies in which researchers attempted to assess its effects, both short-term and long-term. The findings of these studies, however, are inconsistent and inconclusive. With the possible exception of several short-term effects, it is difficult to predict the outcomes of DARE instruction, especially over the long term. And, while follow-up studies frequently experienced high attrition rates, studies conducted immediately after the completion of the DARE program often employed weak designs or selected control groups of questionable validity. Interpretation of the early research on DARE and its relevance for DARE today is further complicated by the 1994 revision which emphasized teaching strategies designed to make DARE more interactive. As yet, there is a paucity of studies conducted after the 1994 revision, and even studies published after that date frequently describe the effects of the earlier version.

Certainly, there is a need for additional, carefully planned and carried-out studies of DARE. Attention in future studies should be given to variables such as, among others, subject and community characteristics that may affect DARE outcomes. Short-term evaluations may examine community acceptance of DARE, while long-term studies may assess the legitimacy of DARE's claims as a drug-resistance and violence-avoidance program over the entire period of public schooling. Until reliable generalizations are available, decisions to include or maintain DARE in a community school will likely have to be based on locally collected data.

CHAPTER 3

THE STUDY

Phase 1: Attitudes toward DARE

Research Problem

The problem that this study was designed to investigate was: What are the attitudes of teachers, students, and parents in West Vancouver toward the DARE program?

Rationale

An important part of an evaluation of the efficacy of DARE is the examination of the attitudes of relevant persons, either directly or indirectly involved in the program. The support of teachers and parents is crucial to the success of the program in West Vancouver, especially since there is evidence in the literature to suggest that it is difficult to maintain such a program in schools without this support. Student support for and acceptance of the program is equally important for its success.

Research Questions

Research questions designed to elicit their opinions, preferences, and perceptions were developed by the researcher in order to examine the attitudes toward DARE of the subjects in this study. These questions, in turn, were critiqued by Sergeant Jim Almas of the Community Policing Section of the West Vancouver Police Department and Mr. Geoff Jopson, Director of Curriculum and Staff Development, West Vancouver School District. The following questions, which pertain to the Core and Middle School Programs only, formed the bases of the questionnaires used in the study.

A. Attitudes of DARE Class Teachers

- Do teachers think that there is a need for a drug-resistance program in their school? In their school district?
- Do teachers think that there is a need for a violence-avoidance program in their school? In their school district?
- What do teachers know about DARE?
- Do teachers agree with the objectives of DARE?
- Do teachers think that DARE should be taught in their school?
- Do teachers think that Grades 5 and 7 are suitable grades for DARE instruction?
- At what age do teachers think that students should receive instruction in drug/violence prevention ?
- At what ages/grade levels do teachers think that exposure to drugs is most likely to occur?
- At what ages/grade levels do teachers think children are most likely to encounter violence?
- Do teachers think that a drug-resistance and violence-avoidance program should be taught by uniformed police officers?
- Do teachers think that the length of the DARE program (Core 17 hours; Middle School 10 hours) is appropriate for the program to be effective?
- Do teachers object to the amount of classroom time that DARE requires?

- Do teachers think that the teaching strategies and materials used in DARE are suitable for their students?
- Do teachers think that the teaching strategies and materials used in DARE are appropriate for achieving the objectives of the program?
- Do teachers think that DARE has positively affected student attitude and behavior toward drug use?
- Do teachers think that DARE assists students to resist peer pressures to engage in drug use or violent behaviors?
- What do teachers think of their role in the DARE program?
- Do teachers think that DARE has an important place in their overall school drug-prevention program?
- How well received by students do teachers think DARE is?
- How well received by DARE parents do teachers think the program is?
- What changes, if any, would teachers make to DARE?

B. Attitudes of Students

- Do students think that there is a need for a drug-resistance and violence-avoidance program in their school? In other schools?
- Do students think that DARE provides them with relevant and up-to-date information about drugs and drug use?
- Do students think that a uniformed police officer is the most appropriate person for teaching a drug-resistance program?
- Do students think that they can trust the police officer who teaches DARE in their school?

- To what extent do students in a DARE program develop a relationship with the police officer?
- Does DARE affect the way in which DARE-program graduates view police officers in the community?
- Do students think that the teaching strategies utilized in the DARE program are suitable for achieving the program's objectives?
- How appropriate do students think the materials used in DARE are for achieving the program's objectives?
- Do students think that the present length of the DARE program is adequate for a drug-resistance and violence-avoidance program?
- How effective do students think DARE is for preparing them to resist drugs and violence? As students in school? As adults at work and in the community?
- Have the knowledge, skills, and attitudes learned in the DARE program assisted students in resisting drug use?
- Has the DARE program provided students with the knowledge, skills, and attitudes required to resist violent behaviors?
- Have students used the techniques learned in the DARE program to resist drug use and violent behaviors?
- Do students think that DARE has the support of their teachers and parents?
- Do students think that the DARE program should continue in their schools?

- What changes, if any, would students make to DARE?
- Do students think that courses such as DARE should be offered at grade levels lower or higher than their present grade?
- How do DARE graduates who have been away from the program for a year or two respond to the preceding questions?

C. Attitudes of DARE Parents

- Do parents of DARE students think that a drug-resistance and violence-avoidance program is necessary in their child's school? In the school district?
- What do parents think the objectives of a drug-resistance and violence-avoidance program should be?
- Do parents of children enrolled in DARE know and understand the objectives of the program?
- Do parents think that they are well enough informed of the program?
- Would parents attend an orientation to DARE workshop offered by the DARE officer in their child's school?
- Do parents think that the grades in which DARE is taught are age-appropriate for such a program?
- At what ages/grade levels do parents think that exposure to drugs is likely to occur?
- At what ages/grade levels do parents think that children are likely to encounter violence?

- Do parents discuss DARE with their children at home? If so, who usually initiates the discussion?
- Do parents think that a uniformed police officer is a suitable person to teach DARE? In elementary grades? In secondary grades?
- How effective do parents think DARE is for providing their child with the knowledge, skills, and attitudes for resisting the inappropriate and excessive use of drugs and the avoidance of violence.
- Do parents of DARE children think that the program takes up too much class time?
- Do parents think that courses such as DARE should be offered at grade levels lower or higher than their child's present grade?
- What changes, if any, would parents of DARE students make to the program?

The Setting

The study was conducted in West Vancouver, British Columbia, Canada during the spring of 1999. West Vancouver, located across the bay from Vancouver, is a residential community of approximately 46,000 people. It is one of the most affluent municipalities in Canada, and the majority of its residents are well-educated professionals, executives, or entrepreneurs. Seventy percent of the residents have attended university and of these, 30% hold university degrees. Fifty percent of the population of West Vancouver is married, with single-parent families comprising only 8% of the families. Demographic patterns identified recently revealed that the residents of West

Vancouver are aging, with 27% of the population being over 60 years old and 75 years and older being the fastest growing age category. As the age patterns of West Vancouver are changing, so is the ethnic makeup of the community. Whereas the percentage of residents who acknowledge English as their mother tongue (82%) declines slowly, the percentage of those whose mother tongue is Chinese increases rapidly (Woo, 1996). In 1991, German and Chinese were each the native language of about three percent of the residents in West Vancouver.

School District #45 (West Vancouver) is a medium-sized school district with 3 primary schools, 10 elementary schools, 3 high schools, and an enrollment of approximately 6,500 students. In May, 1999, there were 500 students in Grade 5 and 465 students in Grade 7, the two grade levels in which DARE was taught. Grade 6 and 8 students numbered 521 and 570.

The West Vancouver Police Department, with a complement of 77 officers, is a municipal police force headed by a chief constable. DARE programs are the responsibility of the Community Policing Section (CPS), which consists of one sergeant, one corporal and three constables. During the school year 1998-1999, DARE courses were taught by members of CPS and two officers from other sections to 45 classes in the 13 public elementary schools. Additionally, DARE courses were taught in two private schools located in West Vancouver and one public elementary school located in North Vancouver, an adjacent community.

The literature search failed to locate a report of a study conducted in either the United States or Canada in a community that was comparable to

West Vancouver on educational levels, employment characteristics, family income, and ethnicity. The sole Canadian study was conducted in Victoria, the capital city of British Columbia, and while this city has sections that may share some common attributes with West Vancouver, on the whole, the two municipalities are quite dissimilar.

The Subjects

The entire membership of each defined subject group was included in this study. The opinions, preferences, and perceptions of populations, rather than samples selected from populations, were elicited and described. The purpose of this study was to determine the attitudes of students, teachers, and parents toward the DARE programs taught in West Vancouver.

A. Students

Students in the study were organized into two general groups and labeled either *DARE* or *DARE Graduate* students (henceforth referred to as *Graduate* students). Two sub-groups comprised each larger group. *DARE* students were further classified as either *Core* or *Middle School* students. *Graduate* students were classified as either *Core Graduate* students or *Programs Graduate* students

***DARE* Students**

The number of questionnaires collected from students in both DARE groups was 1,089. The percentages of males and females in the DARE groups were quite similar (Table 1).

Table 1: Composition of DARE Groups

Program	*Number*	*Sex*	
		Male	*Female*
Core	588	301 (51%)	287 (49%)
Middle School	501	239 (48%)	262 (52%)
Total	1089	540 (50%)	549 (50%)

DARE Core students were enrolled in 5th-grade classes in the 10 West Vancouver schools, but in 6th-grade classes in both private schools and the school outside the district (Table 2). *Middle School* students were enrolled in 7th-grade classes in all schools except one of the two private schools, where the Middle School Program was taught in Grade 8.

Table 2: Description of Students in DARE Programs

Program	*West Vancouver*				*Private Schools*				*North Vancouver*			
	Gr	*Number*	*M*	*F*	*Gr*	*Number*	*M*	*F*	*Gr*	*Number*	*M*	*F*
Core	5	469 (94%)	50%	50%	6	100 (98%)	56%	44%	6	19 (76%)	53%	47%
Middle School	7	387 (83%)	48%	52%	7	23 (85%)	40%	60%	7	24 (80%)	38%	62%
					8	67 (81%)	51%	49%				
Total		856				190				43		

Percentages following "Number" represent the proportions of students who filled in questionnaires.

The mean age of the *Core* students was 10.6 years, with the mean age for *Core* students in Grade 5 being 10.4 years and the mean age of the students in Grade 6 being 11.6 years. Students in the Middle School Program averaged 12.4 years of age. The mean age of the 7th–grade students in this group was 12.3, while the 8th–grade students in one of the private schools averaged 13.6 years of age.

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Of the 1,232 students in enrolled in Core Program classes (*N*=627) and Middle School classes (*N*=605) in May 1999, 94% and 83%, respectively, completed questionnaires. The remaining students (*n*=143, 12%) either had not received one of the DARE programs during the school year and therefore were not eligible to complete the questionnaires, were absent during the day that the questionnaires were administered, or for some other reason were not in class. (It is not uncommon for students to be involved in activities that take them away from the classroom during the period of the year when the questionnaires were completed.) In conversations with teachers concerning absent class members, the researcher was given no reason to think that the absentee students would be a source of systematic error. With percentage rates that vary from 76% to 98% (overall percentage is 88), it seems reasonable to presume that the responses to the items in the questionnaires are fairly representative of the students who received DARE instruction in West Vancouver (including the two private schools and the out-of-district school) during the school year 1998-1999.

***Graduate* Students**

Six hundred and seventy-two students comprised this group. For the most part, *Core Graduate* students were enrolled in Grade 6, with just 11% coming from the two Grade 7 classes in one of the private schools. All students in this group had received the Core Program the previous year. These students were assessed to determine the attitudes toward DARE of those students who were just one year removed from the program.

Table 3: Description of *Graduate* Students

Core Graduate **Students**					***Programs Graduate*** **Students**				
Grade	**No. %**	**Mean Age**	**Sex**		**Grade**	**No. %**	**Mean Age**	**Sex**	
			M	**F**				**M**	**F**
6	374 (72%)[1]	11.4	47%	53%	8	202 (35%)[1]	13.5	51%	49%
7	48 (68%)[1]	12.5	48%	52%	9	48 (59%)[2]	14.5	50%	50%
Total	422		47%	53%	Total	250		51%	49%

[1] Percent of students in grade that completed questionnaires
[2] Percent of Grade 9 students available for study

Eighty-one percent of the *Programs Graduate* students were enrolled in Grade 8 classes; the remaining students (19%) were from two Grade 9 classes in one of the two private schools. All but one of the Grade 8 classes were from a single high school—the only school that permitted complete access to its students. The student body at this school did not appear to be markedly dissimilar from that of the other two high schools. However, selection limitation suggests the possibility of bias in the sample of 8th-grade students and this possibility should be considered when interpreting results. Five hundred and seventy students were enrolled in Grade 8 classes in School District #45 in Vancouver in May 1999. The number of these that would have qualified for the survey (i.e., had completed one or both DARE programs in previous grades) is not known. The percentage of 8th–grade students that completed questionnaires is based on the entire population of 8th–grade students in the school district.

Assessing students in the *Programs* group would provide information about the cumulative affects of the two DARE programs on their opinions, preferences, and perceptions of DARE. Moreover, the literature suggests

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that high school students are more likely than elementary students to engage in drug use, including alcohol. Therefore, these students are likely to have had greater opportunity to use drugs and, as a result, greater opportunity to use what they had learned in DARE to help them to resist drugs.

B. Teachers

All teachers whose classes received DARE instruction during 1998-1999 were presented with questionnaires. For whatever reason, in only 8 of the 14 DARE schools did every teacher involved in DARE classes return completed questionnaires. Nevertheless, questionnaires were completed in each school, and questionnaires were collected from 36 of the 43 eligible teachers, for a response rate of 84%. An additional nine teachers who had had DARE classes in the previous year requested permission from the researcher to submit complete questionnaires and are included in the study.

C. Parents

As students in DARE classes handed in completed questionnaires, they were given questionnaires to take home to their parents. In total, 1089 parent questionnaires were distributed to students. According to teachers, it was likely that not all parents received a questionnaire. Since the number of questionnaires actually delivered to parents is impossible to determine, the response rate of 39% is based on a total of 422 returned to the researcher. As can be seen in Table 4, a greater number (62%) are from parents of children in the Core Program, and they are also equally divided between the parents of boys (50%) and the parents of girls (50%).

Table 4: Children's Characteristics of Responding Parents

Sex	Core Program	Middle School	Total
Male	132	77	209
Female	133	80	213
Total	265	157	422

Methodology

A survey research model employing questionnaires was utilized to collect the data required to answer the research questions. This model is used frequently by researchers as a systematic method of data collection to assess attitudes in a variety of settings, including schools. The steps of the survey model include (a) defining the survey objectives, (b) writing the items and constructing the questionnaire, (c) pretesting the questionnaire, (d) selecting the sample from a population, (e) preparing the letter of transmittal, (f) administering the questionnaires, (g) coding/tabulating/summarizing the responses, (h) analyzing the data, and (i) reporting the results (Borg & Gall, 1983).

In addition to the threat posed by the selection of a sample which is not representative of the population, a number of factors pertaining to the items in the questionnaires influence the validity of the findings of a study employing a survey research model. Among these factors are the following: the content validity of the questionnaire (i.e., the degree to which the items relate to the research problem and the adequacy of the items for covering all aspects of the problem), the degree to which respondents understand and accurately interpret the items in the questionnaire, their willingness to respond and the honesty of their responses, the authentic recording and the proper analysis of the responses, and the accurate interpretation and reporting of the results (Mouly, 1978).

Instruments

Eight questionnaires were developed for the study. Items in these questionnaires were designed to assess attitudes toward the DARE program, and varied from those which required respondents to agree or disagree with specific aspects of the program (e.g., objectives, teaching strategies) to those that required an overall assessment of DARE as a drug-resistance and violence-avoidance program.

Preliminary questionnaire development consisted of the following stages. (1) A literature search (which involved, among other sources, *Educational Resources Information Center (ERIC)*, *Social Science Abstracts* and other indices, including indices in criminology and relevant journals, and the DARE America web site) was conducted in order to locate studies in which previous researchers had attempted to assess attitudes toward drug education programs, including DARE. (2) Authors of recently published studies were contacted by letter, fax, or e-mail for copies of the questionnaires used in their studies. To the extent possible, authors of earlier reports were located by the researcher using Internet search engines and then contacted with a request for copies of their instruments. (3) The questionnaires from previous studies were examined as possible models for the present study.

Fifty-nine questionnaires that had been used in prior research were examined in preparation for developing the questionnaires used in this study. Of these questionnaires, 36 (61%) of the questionnaires consisted of closed-response items only, 6 (10%) contained opened-ended items only, while the remaining 17 (29%) questionnaires contained both closed and open-ended items. Six of the 21 closed-item questionnaires prepared for students contained more than 100 questions. One questionnaire, designed to assess police attitudes toward DARE, simply consisted of four closed-response items. The assessment of parents' attitudes in one school district in the United States was conducted with a 3-item closed-response instrument. The average questionnaire for students consisted of 64 closed-response items and 3 open-ended items.

A number of the questionnaires required respondents-in some studies these were young children in elementary school—to be very specific in describing their use of illegal drugs. Such information was not an aspect of the present study, since this is an assessment of DARE and not student drug use or violent behaviors. In the present study, in the two items that refer to drug and violent incidents, *Graduate* students are asked simply if they have had an opportunity to use the attitudes and skills learned in DARE.

The questionnaires developed for the present study consist of both closed-response and open-ended items. In order to have a means for comparing the responses of the several student groups, a 15-item scale, referred to here as the *DARE Attitude Scale (DAS)* was inserted within the questionnaires for the *DARE* and *DARE Graduate* students. The items in this scale require the respondent to *agree* or *disagree* (using a Likert-type scale) to claims commonly made in the literature to support DARE. The *DAS*, then, is considered by the researcher to be a means for measuring a student's acceptance of DARE. Cronbach's alpha was computed as a measure of reliability for *DAS*. An alpha of .91 (for data collected from all subject groups) was sufficiently high to place it well beyond the .79 which Borg and Gall (1983, p. 282) referred to as a *medium* reliability coefficient for attitude scales. An alpha of .88 was obtained when data were selected from the *DARE* students and .92 for data selected from the *Graduate* students.

Because all subject classes in the school district were to be included in the study, it was not possible to pretest the questionnaires. Instead, several experienced teachers were asked to comment on readability and comprehensibility. Drafts of the questionnaires were reviewed by Sergeant Almas and Mr. Jopson, prior to being presented to Chief Constable Churchill for final approval and acceptance. These questionnaires are found in Appendix C.

Administration of Questionnaires

Questionnaires were administered to students and teachers, following the completion of DARE in each school, during the months of April, May, and June 1999. In 6 of the 13 elementary schools and in one secondary school, the researcher administered and collected the questionnaires, in the remaining schools, classroom teachers supervised the students as they completed their questionnaires. No DARE police officer was in a school while the questionnaires were being answered. Furthermore, questionnaires were either picked up directly by the researcher or delivered to the School Board Office where they were held for the researcher. To reduce the threat to validity caused by response effect, respondents to the questionnaires were guaranteed anonymity.

As mentioned above, each student in a *DARE* class was given a parent questionnaire. This was to be completed and returned by the student to his/her teacher[1]. Each parent questionnaire was accompanied by a letter of transmittal requesting the parent's cooperation in completing the questionnaire. This letter stated the purpose of the survey, the significance of the study, and the importance of parental opinion in assessing attitudes toward the DARE program. The Letter of Transmittal is found in Appendix C.

Summary

In this chapter, the research problem was stated and the research questions were presented. Questionaire development and administration were described.

The setting for the study was an affluent, medium-sized, residential community in British Columbia, Canada. Subjects included students in two DARE programs, graduates of DARE programs, teachers in DARE classrooms, and parents of DARE students.

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[1] Thirty-five (8%) of the questionnaires were returned to the researcher by mail, the last one being received during the first week in August.

CHAPTER 4

ANALYSIS OF QUESTIONNAIRES

Part A: The Closed-Response Items

Procedure

The analysis of the closed-response items was done using the SPSS Base 9.0 program for a personal computer.

Items in the eight questionnaires were designed to provide answers to a number of questions on a variety of topics. When a question was considered which was general to the questionnaires, relevant items in each questionnaire were identified, integrated, and analyzed. When topics were specific to a particular group, they were analyzed and reported separately. Items used in the analyses of the various questions are identified in Appendix C.

Is There a Need for a Drug-Education Program?

In child/teacher's school? The initial items in the *DARE* students', teachers', and parents' questionnaires asked respondents' opinions concerning the need for a drug education program in their (or their children's) schools and in other West Vancouver schools. Eighty-four percent (916/1089) of the students in the two *DARE* groups responded with a "Yes" to the item that asked if there was a need for a drug education program in their school. *Sex* of the respondent did not seem to be a factor, since almost the same percentage of boys (85%) as girls (83%) responded affirmatively to this question; however, the difference between the percentage of students in the *Core* Program (90%) and the percentage of *Middle School* students (77%) responding "yes" to this question was significant (z = 5.396). Percentages of students responding "Yes" by *school* ranged from a low of 70% to a high of 98% (median = 84%). Since this study was not to result in comparisons among schools, percentages by school are not reported here. This analysis was conducted simply to see if there were individual differences. Since the number of teachers in DARE classrooms was small (between one and four teachers per school) and the total number of teachers only 45, determining response percentages for each school was not appropriate. As a group, 96% (43/45) of the *DARE* teachers said that a drug education program was needed in their school. A similar percentage (96%) was obtained from the *DARE* parents' questionnaires. Neither sex of child nor *DARE* program (either *Core* or *Middle School*) was a factor in the parents' responses.

In West Vancouver schools?. When asked if there was a need for a drug education program in other West Vancouver schools, 97% (1051/1089) of the *DARE* students replied that there was. The percentage of "yes" responses were similar when boys (96%) and girls (97%) were compared, and differed only slightly when responses were arranged by *program* (*Core* = 98%; *Middle School* = 95%). The percentage of "Yes" responses by *school* ranged from 100% to 91%, with the median being 97%. *DARE* teachers also reported a high percentage (96%, 43/45) of "Yes" responses. The two teachers who differed in their responses left the item unchecked, which was then coded as "uncertain." Parental concern for a drug education program in

West Vancouver was revealed in the great number (415/422; 98%) of "Yes" responses on their questionnaires. Only four parents of *Core* Program students and one parent of a *Middle School* Program child stated that there was no need for a drug education program in West Vancouver schools. The remaining two parents were "undecided."

Is There a Need for a Violence-Avoidance Program?

In child/teacher's school? Seventy-six percent (826/1089) of the *DARE* students acknowledged the need for a violence avoidance program in their schools. The difference between the percentage of "Yes" responses (82%) from the *Core* students and the percentage of similar responses from the *Middle School* (69%) students was significant (z = 5.000). When analyzed according to *sex*, the percentage of "Yes" responses from boys (78%) was significantly higher statistically (z = 1.93; p < .05) than the percentage of the same responses (73%) from girls. Percentages of "Yes" responses arranged by *school* ranged from 65% to 91% (median = 74%).

Much larger percentages of teachers (93%; 42/45) and parents (96%; 407/422) than *DARE* students reported a need for a violence avoidance program in their particular schools. Indeed, only two teachers and 13 parents (the remaining teacher and parents were "uncertain/undecided") saw no need for such a program in their school. The patterns revealed in the student data that suggested that *program* and *sex* were variables in the selection of "Yes" to this question were not found in an analysis of the teachers' or parents' data.

In West Vancouver schools? A much higher percentage (89%; 970/1089) of *DARE* students stated a need for violence avoidance education in their school district than they did in their own schools. The percentages of "Yes" responses for schools ranged from 80% to 95% (medium = 91), much higher than when the question pertained to their individual schools. When analyzed by p*rogram,* the pattern was similar to that above (that is, the questionnaires of the *Core* students contained a significantly larger percentage [92%] of "Yes" responses than those of the *Middle School* students (86%; z = 3.37, p < .01). Nevertheless, the percentage of boys (89%) responding "Yes" is similar to the percentage of girls (88%) responding in a similar manner.

Teachers also registered a large number (43/45; 96%) of "Yes" responses, indicating their perception of the need for a violence avoidance program in the community's schools. Parents' recognition of this need was equally as great (97%) as the teachers'. Parents' responses were not affected by the *DARE* program their children were in nor by the *sex* of their children.

When Are Children Likely to Encounter Drugs and Violence?

Illegal Drugs. When asked at what age and grade children "may encounter" illegal drugs (although not necessarily in their school), teachers' responses ranged from 5 to 13 years of age, with the mean age being 10.7 years (median = 11; mode = 10). Of the 42 teachers who answered this question, over 65% (28/43) suggested that illegal drugs may be encountered by Grade 6. All teachers believed that by age 13 and Grade 9, students may have encountered illegal drug use somewhere in their lives. Parents' responses to this question ranged from 4 to 17 years of age, with a mean of 11.5 years, a median of 12 years, and a mode of 12. A comparison of mean ages by *school* ($F_{13,380}$ = .793, p>.05) revealed no significant differences. Neither was there a difference between mean ages when arranged by *sex* of child ($F_{1,380}$ = .757, p>.05). Ninety-five percent of the parents believed that by Grade 9, students may have encountered illegal drug use.

Violence. In their response to a similar question concerning violence, teachers' responses ranged from 5 years to 11 years, with the mean age being 7 years, the median being 11 years, and the mode (43%) being 5 years. Fourteen percent of the teachers believed that by Grade 1 children may have already experienced violence in their lives, and all teachers suggested that by Grade 9, children may have encountered some form of violence.

A few parents (3/358) stated that they believed violence may occur in a child's life by age 3. The mean age (9 years) suggested by parents was two years higher than that suggested by teachers. The median and mode for parents was 10 years and 5 years, respectively. An $F_{13,357}$ of .134 (p>.05) revealed no difference among the means of the parents' responses when arranged by school.

When Should Drug and Violence Avoidance Programs be Taught?

When asked to state the youngest age at which students should receive instruction in drug-resistance and violence-avoidance education, teachers responses varied from 5 years to 12 years, with a mean of 9 years (median and mode = 10). Over 7% (3/41) of the teachers who responded to this item recommended that such programs be offered in kindergarten. Twenty-two percent suggested these programs should be taught in the primary grades (kindergarten through Grade 3). All teachers agreed that by the end of Grade 7 students should have completed a drug-resistance and violence-avoidance course.

Parents were asked to comment on whether they thought the grade in which their children received instruction in drug abuse and violence avoidance was age- and grade-appropriate. Ninety- percent (368/412) of the parents (*Core* = 88%; *Middle School* = 91%) responded "Yes." Of the 42 parents (10%) who disagreed, 16 (*Core* = 11; *Middle School* = 5) thought the instruction should have occurred in an earlier grade; while the remaining 26 parents (*Core* = 18; *Middle School* = 8) stated that the instruction should have occurred at a later grade. The most frequently suggested grade for drug- and violence-avoidance instruction by this group of parents was Grade 7, although 22% (9/42) of the dissident parents recommended this instruction for children in the primary grades.

Graduate students acknowledged strong support (78%, 526/672) for a drug abuse and violence avoidance program offered at the Grade 5 level. Nevertheless, only 69% (465/672; *Core* = 72%, *Middle School* = 63%)

responded "Yes" to an item that asked them if they thought that 5th-grade students were "old enough and mature enough to profit" from such a program. Interestingly, in their response to a related item on the *DARE* students' questionnaires, 62% (*Core* = 56%; *Middle School* = 69%) of the students who had just completed DARE programs recommended that "DARE or programs like DARE" should not be offered below Grade 5.

The DARE Program

In this section of the analysis, a number of topics and questions pertaining to the DARE program are examined.

Acceptance of Objectives

Ninety-five percent of the *DARE* teachers agreed with the stated objectives of the DARE programs. Only one of the two teachers who disagreed identified the objective with which he or she disagreed. This teacher disagreed with *Objective 8* "...developing decision-making skills in students." When teachers were asked if other objectives should be included for DARE, the following were each mentioned once: (a) strategies for reducing bullying in schools, (b) ways to deal with emotional abuse, and (c) helping students to make better choices of friends.

DARE parents were presented with a list of DARE objectives and asked to record their agreement or disagreement with each objective. The percentages of parents who agreed with the objectives are reported in Table 5.

Table 5: Parents' Agreement with DARE Objectives

DARE Objectives	Core Parents	Middle School Parents	Total %
make students aware of the dangers of drug abuse	93%	95%	**94% (391/417)**
help students to understand the consequences of their choices	91%	93%	**92% (384/417)**
build student self-esteem	80%	75%	**78% (326/417)**
provide students with ways to resist drug use	94%	95%	**94% (391/416)**
develop assertiveness skills in students	81%	76%	**79% (330/417)**
provide students with positive ways to manage stress	80%	71%	**76% (318/416)**
encourage students to select positive alternatives to drug use	87%	89%	**88% (365/417)**
develop decision-making skills in students	78%	78%	**78% (325/417)**
help students to understand peer and media pressure	92%	93%	**93% (386/417)**
teach students strategies for avoiding violence	93%	95%	**94% (391/417)**
teach students ways to deal with their own and others' anger	86%	86%	**86% (358/417)**
encourage acceptance of human dignity	[1]	79%	**79% (119/150)**
help students to accept need for laws, codes of behavior	[1]	90%	**90% (135/150)**

[1] Objectives of the Middle School Program

As can be seen in the above table, not one objective received the support of all parents, even though support for the objectives was generally quite high. The objectives that received the strongest support from parents pertained to helping students to become aware of the dangers of using drugs, providing them with strategies for avoiding drug use, and teaching students ways to avoid violence. At least 20% of the parents opposed objectives pertaining to student self-esteem, assertiveness skills, decision-making skills, ways to manage stress, and acceptance of human diversity—most of which are also basic objectives of public school education.

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Perceived Achievement of DARE Objectives

An important source of opinion on whether DARE actually works is the primary consumers of DARE, that is, the students. An assessment of attitudes towards DARE should consider the question of whether the objectives of DARE were actually achieved, or at least perceived to be achieved, in the opinion of students who had received one or more DARE programs. The method for attending to this question that the researcher adopted here consisted of two parts. The first part asked the students to check their agreement or disagreement with a number of general statements describing the attitudes, skills, and behaviors that comprise DARE's objectives. In the second part, both groups of students were presented with a number of statements of DARE objectives and were asked to indicate those attributes that they believed they now possessed. As a check on student responses to the latter exercise, DARE teachers were asked to identify the extent to which they thought these objectives had been achieved with their classes--that is, the extent to which they saw evidence of these in their students' behaviors. Teachers responded by checking a Likert-type scale that consisted of categories ranging from *Not at all* (1) to *For all students* (6). Uncertain was assigned "0".

Students. Prior to considering the list of DARE objectives, *DARE* students were asked whether DARE prepares students "with the knowledge and skills they need to resist drugs." Ninety-six percent of the *Core* students and 79% of the *Middle School* students agreed. In response to a somewhat similar item but specifically referring to "resisting drugs as children," 90% of the *Graduate* Grade 6 students and 71% of the Grade 8 students acknowledged agreement. When asked if they thought the DARE program "adequately prepares students to resist drugs in high school," the degree of agreement dropped to 66% (*Core*) and 50% (*Middle School*). The pattern of responses to this item resembled the pattern of responses to an item that asked *Graduate* students if what they had learned in DARE was likely to keep them away from drugs. Seventy-seven percent of the 6th-grade students and 49% of the 8th–grade students said that it was.

Since helping students to avoid or resist violence was another objective of the DARE program, *Graduates* were asked for their opinion on whether they thought DARE effectively did this. Though not strong, there was moderate agreement (Grade 6 = 69%; Grade 8 = 58%) that DARE helps students "to avoid or resist violence."

Eleven statements in the *DARE Attitude Scale* describing DARE objectives were selected for analysis here in order to assess student acceptance of DARE's overall objectives. Means and standard deviations for each group on these items are reported in Table 6. Figure 1 reports the aggregate mean score on each item.

Table 6: Mean Scores by Group on Items of the *DARE Attitude Scale* Connoting Attitude toward DARE Objectives

Statement in *DARE Attitude Scale*	Core	Middle School	Core Graduate	Programs Graduate
Item **1**: Students who go through DARE are better able to resist drugs than students who do not.	4.103 (0.818)	3.687 (0.951)	3.867 (0.918)	3.476 (1.072)
Item **2**: DARE successfully teaches students how best to avoid violence.	4.136 (0.787)	3.685 (0.928)	3.703 (0.993)	3.308 (1.085)
Item **5**: It is easier for students who have had DARE to resist illegal drugs than it is for students who have not had DARE.	4.157 (0.818)	3.649 (1.033)	3.841 (1.016)	3.272 (1.125)
Item **6**: Students who have had DARE are more likely to think about the consequences of using drugs than are students who have not had DARE.	4.376 (2.176)	3.946 (1.033)	4.050 (1.007)	3.756 (1.042)
Item **7**: DARE helps students to think about suitable ways to avoid violence.	4.184 (0.829)	3.757 (0.881)	3.837 (0.993)	3.464 (1.026)
Item **9**: DARE students are more willing to speak up when they are in an uncomfortable situation than are students who have not had DARE.	3.714 (0.976)	3.208 (1.051)	3.295 (1.057)	2.980 (1.069)
Item **12**: Students who have had DARE are more able to resist peer pressure to do something wrong than students who have not had DARE.	4.000 (0.904)	3.503 (1.042)	3.580 (1.035)	3.120 (1.120)
Item **13**: DARE teaches students ways to handle stress without taking drugs.	4.248 (0.823)	3.661 (1.016)	3.846 (1.010)	3.296 ((1.141)
Item **14**: Most students who graduate from DARE believe that taking illegal drugs can damage their health.	4.600 (0.693)	4.465 (0.703)	4.406 (0.771)	3.856 (0.983)
Item **15**: DARE helps students to resist what they see, hear, or read in the media that might influence some people to take drugs or commit violence.	4.000 (0.981)	3.561 (1.027)	3.679 (1.091)	3.072 (1.214)

As can be inferred from the legend in Figure 1, below, a mean score of 4 is required for agreement with a statement. Mean scores above this criterion were calculated for the *Core* students on all items except Item 9, and this mean approached 4. The average mean (4.152) for the *Core* students exceeded the 4 (*Agree*) criterion. The average means for the *Core Graduate* students (3.810) and the *Middle School* students (3.712) approached 4; but

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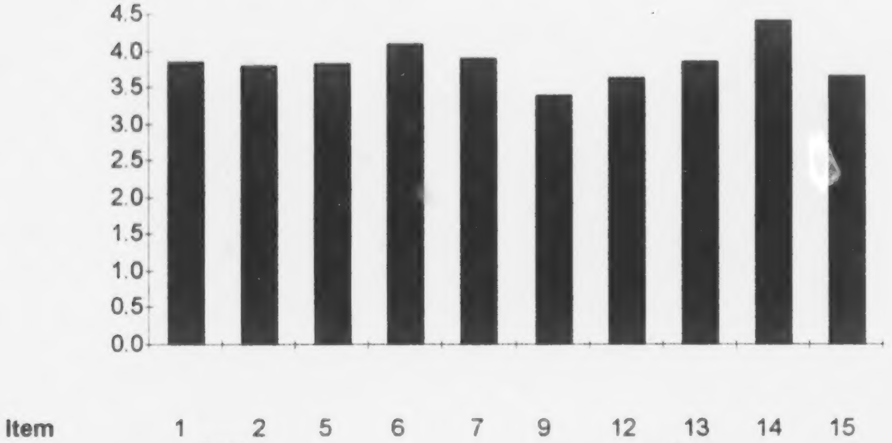
the average mean (3.360) for these items for the *Programs Graduate* students placed just above the *Uncertain* category.

Figure 1: Aggregate Means for All Groups



Scale
1 Strongly disagree
2 Disagree
3 Uncertain
4 Agree
5 Strongly agree

Item
Average Means (SD's)of items:
1. 3.839 (0.945) 9. 3.365 (1.064)
2. 3.787 (0.965) 12. 3.633 (1.050)
5. 3.811 (1.056) 13. 3.849 (1.027)
6. 4.088 (1.509) 14. 4.412 (1.258)
7. 3.877 (0.946) 15. 3.599 (1.093)

As illustrated in Figure 1, the aggregate means reached or exceeded *Agree* (4) on only two items: numbers 14 (4.405) and 6 (4.087), indicating the general perception that DARE effectively persuaded students of the dangers of illegal drug use and also encouraged them to consider the consequences of taking such drugs. An aggregate mean of 3.88 for Item 7 approached 4, suggesting that a large number of students believed that DARE provided them with appropriate ways to avoid violence. Means for Items 1, 5 (comparable items used for reliability), and 13 exceeded 3.8, revealing at least moderate support for the assertion that DARE students were better able to resist illegal drugs then non-DARE students and that DARE taught students ways to manage stress without resorting to drugs. The aggregate mean (3.37) for Item 9 was closer to *Uncertain* (3) than to *Agree* (4). This implied that DARE was less successful at teaching assertiveness than in teaching other objectives, in particular, knowledge objectives pertaining to the use of illegal drugs.

The *t*-test for independent means was used to compare the scores of boys and girls on individual items. Statistically significant differences were found for only three Items, numbers 7 (t = -2.681, df= 1758; p<.01), 13 (t =-1.926; df = 1758; p<.05), and 15 (t = -2.360, df=1758; p<.02). As can be seen in Table 7, the mean score for girls slightly exceeded the mean score for boys on each of these items.

Table 7: Means and Standard Deviations for Boys and Girls on Three Items of the *DARE Attitude Scale*

Items From DARE Attitude Scale	Boys	Girls
Item 7: DARE helps students to think about suitable ways to avoid violence.	3.815 (1.009)	3.936 (0.876)
Item 13: DARE teaches students ways to handle stress without taking drugs.	3.801 (1.062)	3.896 (0.990)
Item 15: DARE helps students to resist what they see, hear, or read in the media that might influence some people to take drugs or commit violence.	3.589 (1.134)	3.712 (1.048)

The preceding questions asked for opinion concerning the general effectiveness of the DARE programs. As mentioned above, both *DARE* and *Graduate* students were asked to identify from a list of DARE objectives those attributes which, because of DARE, they now possessed. The

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percentage of "Yes" responses by each group to each objective is shown in Table 8.

Table 8: Students' Perceptions of DARE Objectives Which They Possessed

DARE Objectives	DARE Students		Graduates	
	Core	Middle School	Core	Programs
increased my awareness of the dangers of drug abuse, including alcohol	89%	83%	88%	82%
taught me strategies for avoiding the use of illegal drugs	91%	77%	86%	67%
improved the way I feel about myself, my self-esteem	61%	33%	43%	30%
taught me how to avoid becoming involved in gangs	80%	72%	69%	50%
taught me how to make better choices about what I should do	83%	60%	70%	55%
helped me to understand and to deal with peer pressures to use drugs	86%	75%	79%	60%
helped me to think about positive activities that I can do instead of taking drugs	82%	62%	72%	48%
improved my willingness to speak up and express myself	63%	40%	45%	33%
taught me how to deal with my anger and the anger of others in non-violent ways	72%	56%	57%	40%
helped me to understand how I might be influenced by TV, movies, advertisements, and music	76%	70%	70%	65%
taught me how to avoid violent situations by using conflict management skills	73%	57%	66%	46%
taught me to consider the consequences of my actions before I act	81%	73%	78%	56%
helped me to recognize what stresses me	71%	43%	57%	44%
taught me that people need to feel respected and wanted	80%	56%	74%	45%
helped me to understand and accept the need for laws and school codes of behavior		66%		50%
helped me to accept and respect people different from myself		67%		62%

A perusal of Table 8 suggests that, at least as perceived by students, DARE was more effective at achieving some objectives than others. When the percentages for each group were summed and averaged, it appeared that DARE was most successful at making students aware of the dangers of

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drug abuse and with teaching students strategies for avoiding illegal drug use. DARE also seemed to be quite effective in helping students to resist peer pressure to use drugs. DARE seemed to be moderately successful in encouraging students to consider the consequences of their actions before they act, in helping them to understand how they might be influenced by media, in teaching them how to avoid becoming involved in gangs, in assisting them to make better choices, and in providing them with positive alternate activities to using drugs.

According to the students in this study, DARE did not appear to be very effective in increasing self-esteem, in encouraging assertiveness, and in assisting students to recognize what causes them stress.

It was interesting to note that a pattern of diminishing percentages emerged when the groups were organized in ascending order by grade level [that is, from *Core* (Grades 5/6)> *Core Graduate* (Grade 6)> *Middle School* (Grade 7)> *Programs Graduate* (Grade 8)]. For all but one objective, the percent of "Yes" responses declined when this order was observed, possibly evidence that as students matured they became less influenced by persuasive strategies such as those utilized by drug-education programs such as DARE.

In order to determine if *sex* was a factor in the percentages above, the responses on each item for the *DARE* students and the *Graduate* students were organized by *sex* and standard scores (*z*) were calculated for the differences. Significant *z*-scores were determined for differences that favored *DARE* boys on items pertaining to self-esteem ($z = 2.90$), the ability to make proper choices ($z = 1.78$), thinking about alternatives to drug use ($z = 1.78$), and willingness to speak up ($z = 2.58$). The percentages of *DARE* girls who stated that DARE taught them how to avoid becoming involved in gangs ($z = 1.92$) and strategies for avoiding illegal drugs ($z = 2.27$) were significantly higher than that for boys in the *DARE* group. Significant differences between the responses of boys and girls in the *Graduate* group occurred on only two items. A higher percentage of girls stated that DARE had made them aware of the dangers of drug abuse ($z = 1.85$), but as with the *DARE* students, the percentage of *Graduate* boys claiming increased self-esteem was significantly greater than the percentage of girls ($z = 2.11$). This latter finding was the only finding common to both *DARE* and *Graduate* students.

In order to examine the cumulative effect of DARE, the responses on the items pertaining to specific objectives collected from the *Middle School* students and the *Graduates* in Grade 8 were organized by number of DARE programs taken. Table 9 records the percentage of “Yes” votes according to group. Because of the much smaller number of subjects in the groups comprised of students who had completed just one DARE program, statistical tests were not used to determine significant differences between percentages. On only 4 of the 16 objectives did the percentages of “Yes” responses for *Middle School* students who had had two DARE programs (that is, the CORE Program and the program they had just completed) exceed the percentages of similar students who had only had the Middle School Program. *DARE Graduates* in Grade 8 with two DARE programs exceeded their peers with only a single program on only one objective. Although it would not be prudent to accept a conclusion based on these data, nevertheless, it seems safe to say that the data do not provide support for arguments which suggest a positive cumulative effect for DARE programs.

Table 9: Data Arranged According to Number of DARE Programs Completed

DARE Objectives	Middle School Program		Programs Gradates	
	1 DARE (100)	2 DARE (386)	1 DARE (40)	2 DARE (209)
increased my awareness of the dangers of drug abuse, including alcohol	78%	84%	83%	82%
taught me strategies for avoiding the use of illegal drugs	78%	77%	75%	66%
improved the way I feel about myself, my self-esteem	42%	31%	30%	30%
taught me how to avoid becoming involved in gangs	72%	72%	58%	49%
taught me how to make better choices about what I should do	62%	60%	65%	53%
helped me to understand and to deal with peer pressures to use drugs	74%	75%	65%	59%
helped me to think about positive activities that I can do instead of taking drugs	62%	62%	60%	46%
improved my willingness to speak up and express myself	41%	40%	40%	32%
taught me how to deal with my anger and the anger of others in non-violent ways	58%	55%	48%	38%
helped me to understand how I might be influenced by TV, movies, advertisements, and music	64%	71%	75%	63%
taught me how to avoid violent situations by using conflict management skills	62%	56%	55%	44%
taught me to consider the consequences of my actions before I act	77%	72%	68%	54%
helped me to recognize what stresses me	43%	43%	40%	44%
taught me that people need to feel respected and wanted	62%	54%	55%	43%
helped me to understand and accept the need for laws and school codes of behavior	59%	68%	63%	47%
helped me to accept and respect people different from myself	67%	68%	68%	61%

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Teachers. Thirty-nine of the forty-five *DARE* class teachers (87%) responded to a question that had them estimate the extent to which they thought the objectives were achieved with their students. They recorded their responses on a Likert-type scale that ranged from *Not at all* (1) to *For all students (6)*, and with *Uncertain* assigned "0". Six teachers either did not respond to the question or recorded *Uncertain* for each item. Their responses were not included in Table 10.

Table 10: Teachers' Opinions of Students' Achievement of DARE Objectives

Behaviors	Teachers		
	Core (27)	Middle School (12)	Total (39)
an awareness of the dangers of drug abuse	4.88 (1.17)	5.25 (0.87)	5.00 (1.08)
strategies for avoiding illegal drugs, including alcohol and tobacco	4.70 (1.07)	4.45 (1.37)	4.63 (1.14)
a negative attitude toward illegal drug use	4.70 (0.99)	4.81 (0.75)	4.74 (0.92)
strategies for avoiding violence	4.21 (1.44)	4.55 (1.51)	4.30 (1.45)
an ability to assess the consequences of one's choices	4.23 (1.34)	4.20 (1.75)	4.22 (1.44)
ways of managing stress without resorting to drugs	4.30 (1.26)	4.00 (1.89)	4.21 (1.47)
a knowledge of positive alternatives to drug use	4.42 (1.28)	3.73 (1.62)	4.20 (1.41)
assertiveness skills and the willingness to use them	4.00 (1.18)	4.09 (1.45)	4.03 (1.25)
increased self-esteem	3.86 (1.42)	3.33 (1.61)	3.68 (1.49)
an ability to resist negative peer pressure	3.71 (1.49)	3.54 (1.29)	3.66 (1.41)
respect for diversity in individuals		3.08 (1.47)	3.08 (1.47)
an understanding and acceptance of the need for laws and standards of acceptable behavior		3.83 (1.40)	3.83 (1.40)

The first number in each case is the mean score for the item. The number in parenthesis is the standard deviation.

Scale: 1 Not at all
2 For a few
3 For more than a few students
4 For many students
5 For most students
6 For all students
0 Uncertain

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According to the teachers who responded, DARE was most successful at teaching an awareness of the dangers of drug abuse. These teachers suggested that this objective was attained by *most* of their students. Teachers thought that *many* to *most* of their students had developed negative attitudes toward using illegal drugs, including alcohol and tobacco, and had learned effective strategies for avoiding their use. Teachers also suggested that *many* of their students had learned strategies for avoiding violence, possessed the ability to consider the consequences of their actions, possessed ways of managing stress, and knew of positive alternatives to drug use. Fewer of their students, however, had learned how to resist peer pressure or respected diversity.

It was noted in Tables 8 and 9 above, that students in all groups except the *Core* group thought that DARE instruction had resulted neither in increased self-esteem nor increased assertiveness skills. Teachers, nevertheless, indicated that they believed that *more than a few* of their students appeared to have increased in self-esteem and *many* of their students had increased in assertiveness skills and in their willingness to use these skills. Since both self-esteem and willingness to use assertiveness skills could only be inferred from student behaviors, it was possible that even though *DARE* students in their classes were acting in ways which implied they possessed these attributes, the students did not perceive any difference within themselves.

The *t*-test for independent means was used to determine if there was a significant difference between the means of *Core* and *Middle School* teachers on any of the objectives. No statistically significant *t*-values were obtained from the analyses.

It was noted that even as DARE was being taught, teachers were beginning to see results. One item in the teacher questionnaire asked teachers to answer "Yes" or "No" to the question: *Whether due to DARE or not, as the program progressed did you notice an increased ability and willingness in your students to work cooperatively with their classmates?* Thirteen *Core* teachers and three *Middle School* teachers acknowledged that they had.

Parents. Eighty-six percent of the parents (364/418) agreed or strongly agreed with a statement that their children were better prepared to resist illegal drugs, alcohol, and tobacco because of DARE. Only 1% (4/418) of the parents disagreed or strongly disagreed with the statement, while 12% (50/418) checked the *uncertain* category.

Figure 2: Parents' Responses to the Statement: *As a result of DARE, my child is now better able to resist illegal drugs, including alcohol and tobacco.*

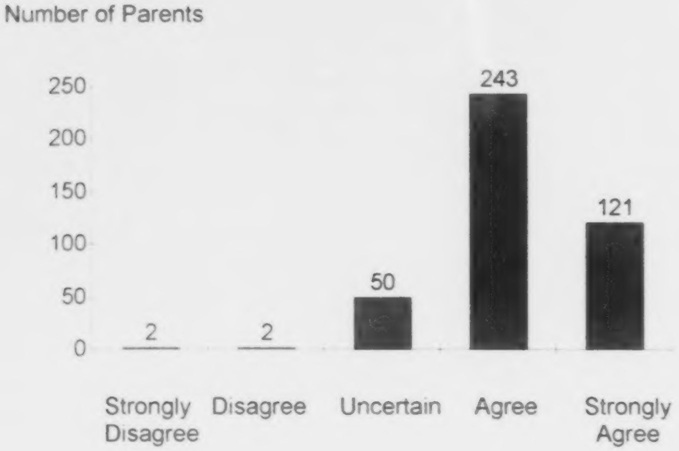
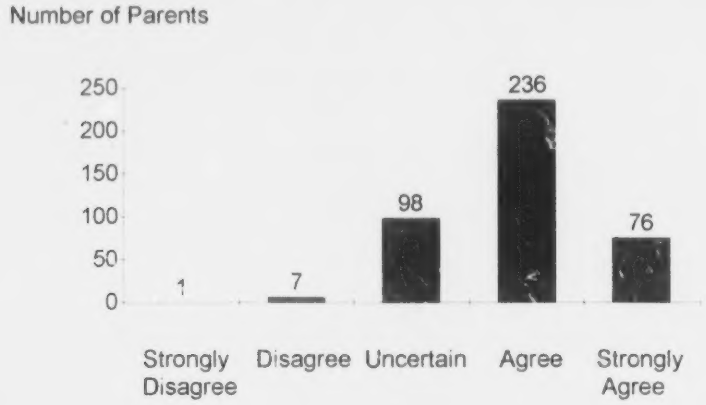


Figure 3: Parents' Responses to the Statement: *DARE successfully teaches children how to avoid violence*



The number of parents who endorsed DARE as a violence avoidance program, though less than above, was still considerable. As can be seen in Figure 3, 312 of the 418 parents (74%) agreed and strongly agreed that DARE teaches children how to avoid violence. Two percent (8/418) did not support this statement, and twenty-three percent (98/418) were unsure.

The *t*-test for independent samples was run to determine if the means on these two items of the parents with children in the Core Program (4.1939, SD = .6394; 3.9354, SD = .7149, respectively) were statistically different from the means of the parents with children in the Middle School Program (4.0645, SD = .7178; 3.8581, SD = .6879, respectively). No significant *t*-values were obtained.

Attitude toward the Police

Although not specifically stated as a DARE objective, there was a general consensus among DARE officers and teachers in West Vancouver that positive attitudes toward the police were an outcome of DARE instruction. This opinion found support in a number of studies which reported positive attitudes toward both police and law enforcement following DARE. Items to test this hypothesis were embedded in sections of each questionnaire.

Parents. Two items on the questionnaire for parents pertained to their perception of the effect of DARE instruction on their children's attitude toward the police. The first item asked parents to respond to the question, *Do you think that your child's attitude toward the police improved as a result of DARE?* Eighty-two percent (347/421) of the parents' questionnaires recorded "Yes" responses. Only 8% (34/421) stated that their children's attitude had not changed during DARE, and 10% (40/421) declined to answer the question, indicating that they were unsure of their response. A number of respondents who left this item blank wrote that their children had always held the police in high regard, and, therefore, it was difficult to assess the effect of DARE on their already positive attitudes. When the responses were arranged by *program* and *sex* of child, the percentage of parents of children in the Core Program recording "Yes" responses (85%) exceeded the percentage of parents of children in the Middle School Program (79%). The *z*-score for this difference was 1.67, indicating that the likelihood of the difference occurring by chance was less than .05. A *z*-score of .176 for the difference between the percentage of "Yes" responses of the parents of boys (84%) and the percentage of parents of girls (81%) was not significant.

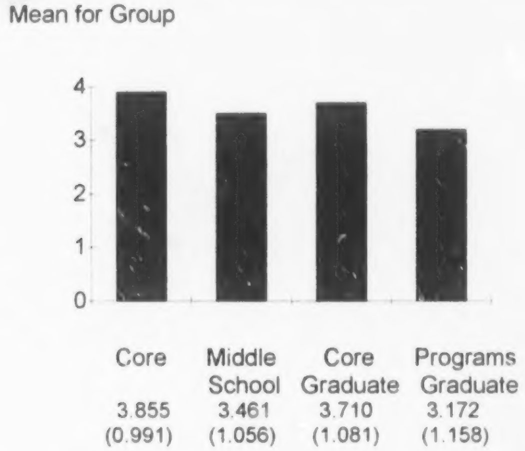
The second item asked parents to check "Yes' or "No" to the question, *Do you think that because of DARE your child is more likely to go to the police in times of need?* The response to this item was even more favorable than the response to the previous item: 93% (355/421) of the DARE parents checked "Yes." The *z*-scores for the differences between percentage responses when the data were organized by *program* (*Core* = 93%; *Middle School* = 92%) or *sex* of child (*Core* = 92%; *Middle School* = .94) were not significant.

Teachers. An item on the teacher questionnaire asked, "Do you think that your students' attitudes toward law enforcement and the police have been positively affected by DARE?" To this question, 84% (38/45) of the *DARE* teachers responded "Yes." A *z*-score of 3.62 for the difference between the percentage of *Core* teachers (90%) and the percentage of *Middle School* teachers (69%) who responded "Yes" indicated that the probability of this difference occurring by chance was less than .001.

Students. Four items on the *DARE Attitude Scale (DAS)* were designed to assess students' attitudes toward the police. Students recorded their agreement or disagreement with each statement on a Likert-type scale. The categories on this scale were: *Strongly Disagree* (1), *Disagree* (2), *Uncertain* (3), *Agree* (4), and *Strongly Agree* (5).

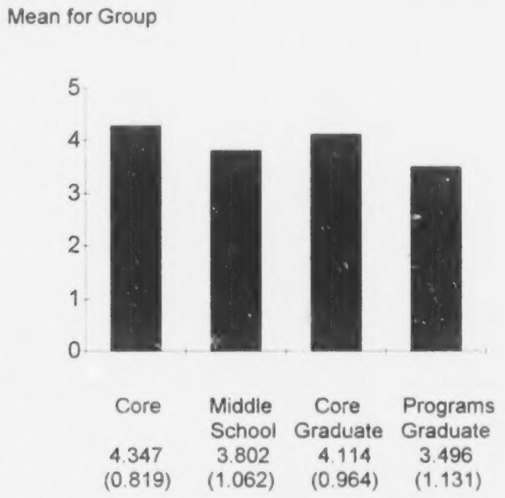
Each of the figures below records the mean responses for the four groups of students. An average response of 4 indicates general agreement of the group with the statement. Means and standard deviations are given below the column for the particular group.

Figure 4: Students' Responses to the Statement*: Students who go through DARE usually have a better opinion of police officers than students who do not.*



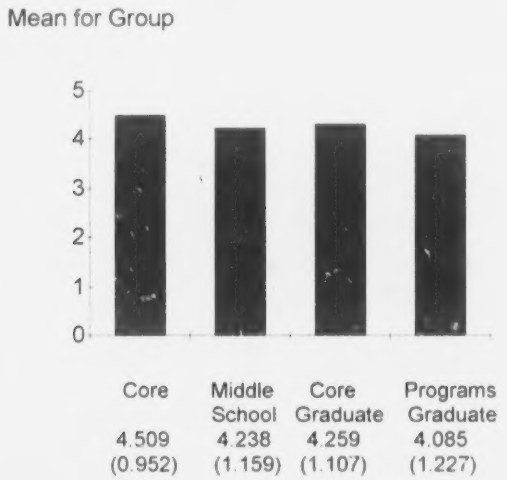
The means for two groups (*Core, Core Graduate*) approached 4, which implied agreement with the statement. The means of the remaining groups (*Middle School, Programs Graduate)* were closer to *Uncertain*. A one-way classification analysis of variance yielded an *F*-ratio of 29.490 (*df* = 3,1759) for p*rogram* which was statistically significant (p<.001), indicating a difference among the means. Tukey's test for post hoc pairwise multiple comparisons was utilized to identify the differences among the means that were statistically significant. Statistically significant (*p*<.05) differences were found for the following comparisons: *Core vs Middle School; Core vs Programs Graduate; Middle School vs Core Graduate; Middle School vs Programs Graduate*; and *Core Graduate vs Programs Graduate*. The pattern of declining scores noted previously was observed here, also. The highest mean was found for the *Core* students while the lowest mean was the average of the *Programs Graduate* responses.

Figure 5: Students' Responses to the Statement: *Most students learn to trust their DARE officer.*



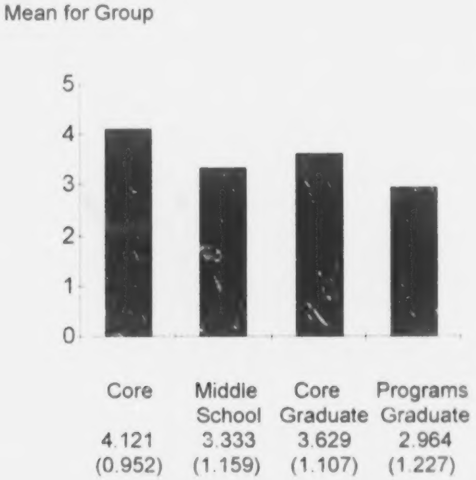
The means for both the *Core* students and the *Core Graduate* students exceeded 4, implying agreement with the statement. The mean of the *Middle School* students approached the *Agree* category. The means of the groups on this question also declined as grades increased. The *F*-ratio (55.839, *df* = 3,1759; *p*<.001) for *program* indicated that there were statistically significant differences among the means of the four groups. Tukey's test revealed significant differences between means for the following groups: *Core vs Middle School; Core vs Core Graduate; Core vs Programs Graduate; Middle School vs Core Graduate; Middle School vs Graduate Programs*; and *Core Graduate vs Graduate Programs*.

Figure 6: Students' Responses to the Statement: ***Most West Vancouver police officers are trying to make our community a better and safer place to live.***



A mean above 4 for each group indicated agreement with the statement, and as with the preceding, the highest mean was for the *Core* students and the lowest was for the *DARE Programs Graduate* Grade 8 group. ANOVA yielded an F-value (42.831; *df* = 3,1759; *p*<.001) that was statistically significant. Tukey's test identified significant differences between the following sets of means: *Core vs Middle School; Core vs Core Graduate; Core vs Programs Graduate; Middle School vs Programs Graduate;* and *Core Graduate vs Programs Graduate.*

Figure 7*:* *Students' Responses to the Statement:* Most students who graduate from DARE think of the police as friends.



The mean score for the *Core* students indicated agreement with the statement and the mean for *Core Graduate* students approached agreement. *Middle School* students were closer to the *Uncertain* category, while the mean for P*rograms Graduate* students fell below this category. As before, the pattern of declining means was evident. The *F*-value of 82.846 (*df* = 3,1759; *p*<.001) indicated differences among the group means. Tukey's test identified the following as significant: *Core vs Middle School; Core vs Core Graduate; Core vs Programs Graduate; Middle School vs Core Graduate; Middle School vs Programs Graduate;* and *Core Graduate vs Programs Graduate.*

Sex of Respondent. Since there is some evidence in the literature that the effects of DARE instruction on boys and girls may differ, the data were organized by *sex* and *program* and treated with a multiple-classification analysis of variance. No significant *F*-values emerged from the analysis, indicating that means of the boys on the four items were not statistically different from the means of the girls; therefore, *sex* was not a factor in their responses to these items.

One additional question pertaining to attitudes toward the police was included in the *DARE* student questionnaires. This item required students to circle the word which they thought best completed the following statement, *If a crime had been committed and I knew who had done it, I (would, would not) tell the police.* Since students are known to have difficulty in turning others into authority for punishment, the researcher and the others who approved of the questionnaire for this study assumed that a positive response here would be some evidence of a positive trusting attitude toward police. Unfortunately, 122 *Middle School* students failed to answer this item, which was at the top of the last page of their questionnaire and perhaps easily overlooked. Nevertheless, even if this item was left unanswered intentionally, the percent of positive responses from this group was 61% (300/489). When the 122 respondents were removed from the calculation, the percent of positive responses increased to 81% (300/367). For *Core* students, the responses which favored informing the police reached 91% (527/579). In order to provide a comparison item, students were also asked to complete the statement *If I knew my friends were doing something that would get them into a lot of trouble, I (would, would not) tell my parents or a teacher."* Positive responses for the *Core* and *Middle School* students to this item were 77% (448/579) and 62% (305/490), respectively. Although the two items are not entirely similar (and one refers specifically to a friend while the reference in the other is uncertain), student responses would seem to favor the police over parents and teachers, perhaps suggesting that this group of students would be more likely to report someone to a police officer than to either their parents or teachers.

Summary. As was evident in their responses, parents believed strongly that DARE positively affected their children's attitudes toward the police, and made the community safer for their children by encouraging them to accept the police as a source of help when in need. Teachers also believed strongly that DARE positively affected students' attitudes both toward the police and law enforcement. The empirical evidence that would be available from a pretest-posttest assessment of student attitudes was not available to this study, making it difficult to assess changes that might have occurred as a result of DARE instruction. The *Core* students responded in the most positive manner to each of the four questions regarding attitudes toward the police on the *DAS;* but, in each case, the means declined as the grade-levels increased. The longest lasting effects pertained to trusting the police and acknowledging that they are trying to make West Vancouver a safer place to live. Interestingly, the latter opinion was held by all groups, both *DARE* and non-*DARE*, regardless of grade level. Overall, it seems that the students for the most part held positive attitudes towards the police, but a decline in attitude as students progressed into high school was a common pattern throughout our analysis.

An Examination of the DARE Program

This section is characterized by a number of questions about specific elements of the DARE program. Here we examined the opinions, preferences, and perceptions of parents, teachers, and students toward the actual teaching of DARE (e.g., the content, strategies, and presentation, among other components).

Who Should Teach DARE?

Both the Core and Middle School Programs were presented by especially trained uniformed police officers, although, as will be observed latter, classroom teachers could play a part if they choose to or were involved by the officer.

The question of who should teach DARE raises a number of issues that in School District #45 appear to be resolved. For example, is placing a lay teacher (that is, a person without a valid teaching certificate and without membership in the British Columbia Teachers' Federation) in a classroom a good thing, and does it violate the teachers' contract with the School District? On the other hand, does not the practical "on-the-street" experience that police officers have with drug enforcement give them a credibility with students that few teachers can attain. To some extent, the problem of non-certified teachers in classrooms is mitigated by referring to DARE police officers as *instructors*.

Parents. The responses to the items on the questionnaire that asked parents to state whom they thought should teach DARE in the elementary school and DARE in the high school were organized by *program* and *sex* of child and analyzed. In selecting their choices of an elementary DARE instructor, the majority of *Core* parents (60%; 158/263) and *Middle School* parents (63%; 95/152) chose "a police officer." The difference between the percentages of the two groups was statistically significant (z = 4.31). The selection receiving the next largest support (*Core* = 13%, 35/263; *Middle School* = 9%, 14/152; mean = 12%) was "police officer and classroom teacher." Ten percent of the parents suggested a "police officer and school counselor" as appropriate teachers for DARE programs. A number of different combinations—most including police officers—were suggested individually by parents who wrote in their responses. None of these combinations received more than 8 mentions, with most being mentioned only once.

As with their selection of the appropriate teacher for DARE elementary programs, the majority (62%, 251/407) of *Core* (65%, 167/257) and *Middle School* parents (56%, 84/150) identified "a police officer" as the teacher of choice for the high-school program. The difference between these percentages was also significant (z = 4.59). Seventeen percent (71/407) of the parents (*Core* = 19%, 49/257; *Middle School* = 15%, 22/150) believed that a "police officer and a classroom teacher" should teach DARE as a team. Beyond "school nurse," which was selected by 5% (21/407) of the respondents, no other teacher or combination was selected enough times to warrant its mention here.

While *program* of child was obviously a factor in parents' choice of a police officer as DARE instructor, *sex* of child was not. Whether the respondent was the parent of a boy or girl made no difference in his/her selection of teacher.

Clearly, parental support for a police officer, whether alone or as part of a team, as a teacher of either the DARE elementary or high-school program was very strong.

Teachers. Support for a police officer as DARE instructor was significant (80%; 36/45) among the teachers who returned questionnaires. The remaining teachers recommended that the DARE officer be assisted by the classroom teacher (2 respondents) and the school counselor or nurse (7 respondents). No teacher responded in a manner that excluded the DARE officer, regardless of the DARE program their students were in.

DARE Students. As a group, 84% (912/1089) of the *DARE* students agreed with a statement suggesting a police officer as the "right person" to teach DARE. The percentage of *Core* students (88%, 515/588) who agreed with this statement was larger than the percentage of a similar group of *Middle School* students (79%, 397/501), and the difference between the two percentages was significant (z = 3.623). The proportion of boys (452/540, 84%) who recorded agreement with this statement was identical to the proportion of girls (460/549, 84%).

A similar pattern was revealed when later in their questionnaire *DARE* students were asked to select from a list the best teacher for DARE. Eighty-seven percent of the *DARE* students selected "a police officer." As above, a larger percentage of *Core* students (93%, 536/578) chose a police officer than did *Middle School* students (79%, 391/493), and the difference between the percentages was highly significant (z = 6.09). Other choices were the following: CAPP teacher (7%, 78/1071), school counselor (3%, 36/1071), and classroom teacher (2%, 18/1071). Twelve (1%) of the *Middle School* students recommended the school nurse as teacher. The proportion of boys (457/530, 86%) who chose a police officer as the best teacher was almost equal to the proportion of girls (470/541, 87%), providing additional support for the prior finding that *sex* was not a factor in choice of teacher.

Graduate Students. *Graduate* students were also asked to agree or disagree with a similar statement identifying a police officer as the "right person" to teach DARE. Seventy-four percent of the students responded positively, with the percentage of agreement among the *Core Graduate* students (81%, 340/422) being larger (z = 5.00) than that among the *Graduate Programs* students (64%,159/250). Unlike the *DARE* students above, *sex* was a factor in their responses to this question. The difference between the percentage of boys (70%, 230/328) and girls (78%, 269/344) who agreed with the statement was statistically significant (z = 2.38).

Program, but not *sex,* was a factor later in the questionnaire when students were required to either select from a list or make their own suggestions of the person who would make the "best DARE teacher." Whereas 74% had agreed in the prior item that this person was a police officer, only 63% (421/666) chose "a police officer" in their response to this item. And, while the choice of police officer remained fairly strong among the

Core Graduate students (76%, 318/419), it dropped significantly for the *Programs Graduate* students (42%, 103/247). However, when the number of selections that included the police officer teamed with another person (e.g., the school counselor, a psychologist, the classroom teacher, parent of a drug addict) were included, the overall mean increased to 71% (475/666), with the percentage for *Core Graduate* students and *Programs Graduate* students increasing to 83% (347/419) and 52% (129/247), respectively.

The school counselor, after the police officer the second most frequently selected person by both student groups, was identified by fewer than 7% (44/666) of the students. Only a few others were identified more than three or four times. These were the following: a reformed drug addict (39/666), a knowledgeable young person in his/her 20's (20/666), a school nurse (10/666), the Career and Personal Planning (CAPP) teacher (10/666). Thirty-five (5%) students (mostly 8th–grade boys) gave totally irrelevant responses to this item.

All Students. An examination of the total student response revealed that 78% (1348/1737) of the student respondents to this survey believed that a police officer was the most suitable teacher for DARE. This percentage increased to 80% (1398) when the "best teacher" is seen as a team comprised of a police officer and another person (most frequently the school counselor). The closest rival, the CAPP teacher, was selected by only 5% (88/1737) of the students surveyed, followed closely by the school counselor (5%, 80/1737).

It is interesting to note that when all students' responses were considered, the percentage of boys (78%, 663/855) who selected a police officer as teacher was identical to the percentage of girls (78%, 685/882), suggesting that *sex* was not a factor in choice of appropriate teacher.

Is the Content of DARE Suitable?

Core and *Middle School* program teachers were asked to register their agreement or disagreement with the statement, *The content of DARE was suitable for my Grade 5/6 (7) students* on a Likert-type scale. Table 11 reports their responses and, further, shows a discrepancy in their opinions of the suitability of DARE content for their students.

Table 11: Teacher Agreement with the Content of DARE.

Program	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
Core (30)	0	1	4	19	6
%	0	3	13	63	20
Mid Sch (13)	1	1	3	3	5
%	8	8	23	23	39
Total % (43)	2	5	16	52	26

When the total teacher responses were considered, 78% (33/43) agreed or strongly agreed that the content of DARE was suitable for their students. However, as can be seen in Table 10, the proportion of *Core* teachers (83%) who agreed exceeded the proportion of *Middle School* teachers (62%) who expressed a similar position. Seven teachers could not decide and so checked the *Uncertain* category. Because of the small number of *Middle School* teachers, the use of percentages here to express findings may not be particularly useful.

In addition to the question of whether the content of a curriculum is suitable to the grade level of the students for whom it is prepared, the question should also be asked concerning its validity, that is, is the content based on knowledge accepted by authorities in the field and is this knowledge current. An informative answer to this question was, of course, beyond the scope of this study. However, student perceptions of DARE's content validity were important to their acceptance of DARE and, therefore, a necessary part of this study.

All students were asked to respond to the following statement in the *DARE Attitude Scale*: *Information about drugs that students learn in DARE is true and up-to-date*. Their responses are in Table 12.

Table 12: Student Agreement with the Content of DARE.

Program		Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
Core	(588)	4	18	91	248	227
%		0	3	15	42	39
Middle School	(501)	9	21	105	228	138
%		1	4	21	46	28
Core Graduate	(421)	6	16	99	183	117
%		1	4	24	43	28
Programs Graduates	(250)	17	29	70	86	48
%		7	12	28	34	19
Total %	(1760)	2	5	21	42	30

Strong support for DARE content was evidenced in these student responses. Over 72% (1275/1760) of the students—using whatever criteria were available to them—suggested that what they had learned in DARE was both truthful and up-to-date. Remarkably, only 7% (120/1760) disagreed, while 21% (365/1760) stated that they were *Uncertain*. The difference between the percentage of boys (70%, 610/867) who agreed or strongly

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agreed with the content of DARE was significantly lower than the percentage of girls who responded in the same manner (74%, 665/893).

Are the Teaching Strategies Used in DARE Appropriate?

Unlike many teachers who prefer to act as facilitators and aids to learning, DARE instructors played a prominent role in directing student activities in DARE classrooms; in fact, when illegal drugs were discussed, their teaching became, understandably, quite didactic. Additionally, unlike teachers who are relatively free to modify curriculum to suit the perceived needs and interests of their students, DARE instructors closely followed prepared lessons and used materials supplied to them from DARE America/Canada. Nevertheless, many of the activities discussed in the following section--such as cooperative learning, role-playing, and skits, among others--utilized inductive, deductive, and inquiry approaches commonly found in contemporary classrooms Just how parents, teachers and DARE students evaluated the teaching strategies and materials was an important question for this study.

Since it was unlikely that many DARE parents were curriculum experts, the question they responded to simply asked them to evaluate the statement, *I agree, at least generally, with the way DARE is taught*. The assumption that underlay this statement was that interested students were likely to discuss DARE at home, and from these discussions parents might have formed some opinion of the teaching strategies used in DARE. Regardless of the validity of this assumption, 359 (86%) of the parents agreed or strongly agreed with the strategies used to teach DARE. The percentage of *Core* parents (88%, 232/263) who agreed to DARE strategies was larger (z = 1.76) than the percentage of *Middle School* parents (82%, 127/155) who acknowledged agreement. Only five *Core* parents and six *Middle School* parents (less than 3%, 11/418) disagreed with the teaching strategies used in DARE classrooms. *Sex* of child was found not to be a factor in either their agreement or disagreement with the teaching strategies.

Teachers, who, it can be supposed, were more likely to adequately assess teaching strategies in the DARE curriculum provided at least moderate support--64% (27/42) checked either the *Agree* (21/42) or the *Strongly Agree* (6/21) category. Nevertheless, there was a large difference in the percentages of the *Core* teachers (73%, 22/30) and *Middle School* teachers (42%, 5/12) who supported DARE's teaching methods. However, as stated previously, using percentages with such a small number of *Middle School* teachers may not be particularly useful and may tend to give their responses an inflated importance.

Students' Choice of Activities in the DARE Curriculum. Students were asked to choose from a list of DARE activities used in the classroom the three that they enjoyed the most. They were not required to order their selections by degree of interest. Therefore, rank was calculated from the total number of times (regardless of the order it was listed) a particular activity was identified. These tables (Tables 13 and 14) give only an indication of how popular a particular activity was. As well, given the fact that students were only given three choices, it should not be inferred from the rankings that any activity was actually displeasing to the students. A reasonable interpretation of the activities ranked low is that they were less well liked than those ranked at or near the top of the list.

Table 13: Rankings of Student Preferences for DARE Activities

Activities	Core	Middle School	Boys	Girls
watching and discussing videos	2	3	2	3
role-playing and acting in skits	1	1	1	1
reading from DARE book, answering questions	8	6	8	7
doing other exercises in DARE book	10	8	10	10
working in groups	7	5	4	5
the DARE box	6	[1]	6	8
learning a lot of new words (definitions)	11	[1]	12	12
graduation ceremonies	4	[1]	7	6
playing games, bingo, Jeopardy, etc.	3	2	3	2
presenting a report in class	9	9	9	9
doing homework assignments	12	7	11	11
meeting with high school role models	5	8	5	4

[1] Not utilized with the *Middle School Program*

Beyond the obvious conclusion that students in both the *Core* and *Middle School* programs preferred role-playing and skits over any other activity, and that watching and discussing videos and playing games such as DARE bingo and Jeopardy were very popular, since three of the activities were not utilized in Middle School classrooms, the degree of agreement between the selections of the *Core* and *Middle School* groups could not be determined. However, the Spearman rank-order correlation coefficient was employed to determine the degree of relationship between the selections of the boys and girls. An r_s of .965 was statistically significant ($p<.01$).

Frequencies based on the data collected from the *Core* and *Middle School* students were used to develop Table 14, below. While this table clearly illustrates that role-playing, skits, videos, and games were the

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activities of choice, it indicates that cooperative learning and high school role-models were also favorite activities. That graduation ceremonies and the DARE box received so many votes was commendable, since neither were *Middle School* activities and, therefore, not on the *Middle School* questionnaire. Doing exercises in the DARE book and homework assignments were in the *Middle School* curriculum, yet many fewer students selected them as favorite activities. Learning definitions associated with drug education appeared in the responses of only 20 students.

Table 14: DARE Activities Ranked by Frequency of Selection.

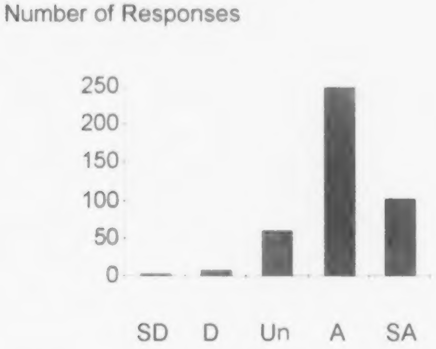
Rank	DARE Activities	Times Selected
1	role-playing and acting in skits	776
2	watching and discussing videos	614
3	playing games, bingo, Jeopardy, etc.	598
4	working in groups	286
5	meeting with high school role models	283
6	graduation ceremonies [†]	186
7	reading from DARE book, answering questions	182
8	the DARE box [†]	169
9	presenting a report in class	55
10	doing other exercises in the DARE book	43
11	doing homework assignments	33
12	learning a lot of new words (definitions) [†]	20

[†] Only a choice for *Core Program* students

Are the Materials Used in DARE Age- and Grade-Level Appropriate?

Parents were asked to assess the materials used in DARE by responding to the question, *I agree with the use of the DARE materials I have seen or heard about from my child.* Their responses, illustrated in Figure 8, following, indicated support for DARE materials as 85% (223/263) of the *Core* parents and 81% (126/155) of the *Middle School* parents checked either *Agree* (4) or *Strongly Agree* (5). The difference between the mean score of the *Core* parents on this question (4.091, SD = .6984) was not significantly greater (t = 1.462, df = 416, p>.05) than the mean for the *Middle School* parents (3.987, SD = .7116). When analyzed by *sex* of child, the percentage of parents of boys (84%, 174/206) who checked *Agree* or *Strongly Agree* was similar to the percentage of the parents of girls (83%, 175/212), indicating that *sex* of child was not a factor in the way parents responded.

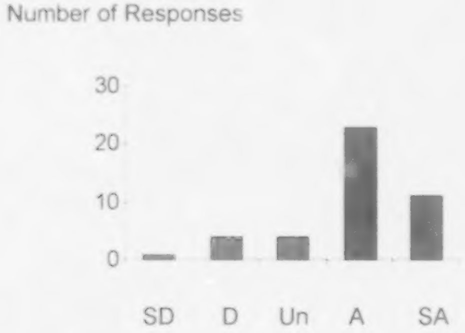
Figure 8: Parents' Responses to the Question: *I agree with the use of the DARE materials I have seen or heard about from my child.*



Teachers' opinions of the suitability of the DARE materials was assessed by questions which had teachers comment on the age-appropriateness of the questions and their appropriateness for achieving the objectives of the DARE programs.

Teachers responded to a statement about the age-appropriateness of the materials by indicating their agreement or disagreement with the statement, *The materials used in DARE were age-appropriate for Grade 5/6 (or 7) students*. These responses are reported in Figure 9.

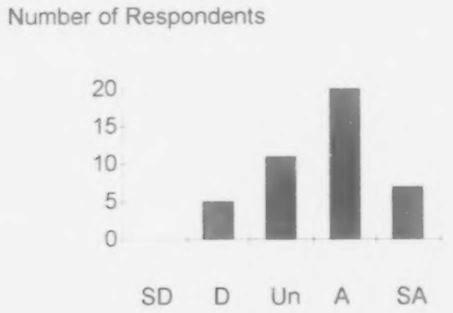
Figure 9: Teachers' Responses to the Statement: *The materials used in DARE were age-appropriate for Grade 5/6 (or 7) students.*



The data illustrated in Figure 9 revealed strong support--79% (34/43) of the teachers checked *Agree* or *Strongly Agree*--for the age-appropriateness of the materials used in DARE classrooms, but Figure 9 does not show that while 87% (26/30) of the *Core* teachers believed these materials to be suitable the percentage of agreement for *Middle School* teachers was only 62% (8/13). A *t*-value of 2.457, *df* = 41, *p*<.05) indicated that the mean for the *Core* teachers (4.133, SD = .8193) on this item was significantly different from the mean for the *Middle School* teachers (3.285, SD = 1.1209).

The second item in this category required teachers to consider whether the materials were suitable for achieving DARE's objectives. Their responses are recorded in Figure 10.

Figure 10: Teachers' Responses to the Statement: *The materials used in DARE were appropriate for achieving the objectives of the program.*



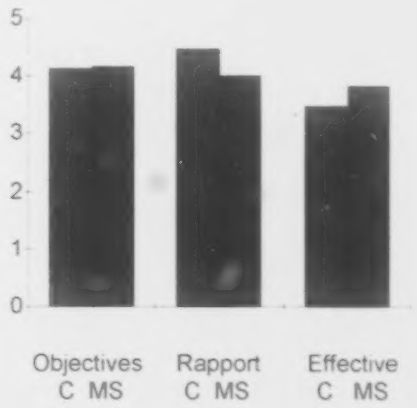
The combined percentages for *Agree* and *Strongly Agree* (63%, 27/43) indicated acceptance of the statement by the majority of teachers assessed. When the responses were grouped and analyzed by *program*, the difference between the means of both groups (*Core* = 3.767, SD = .8584; *Middle School* = 3.4615, SD = .9674) on this item was not statistically significant (t = 1.031, df = 41, p>.05).

Since, as mentioned earlier, the teaching strategies, content, and materials of the DARE programs were quite fixed, teachers were asked if they thought the program should be more accommodating. Specifically, teachers were asked to agree or disagree with the statement, *DARE would be more effective with my students if the curriculum were more flexible.* With the means for both *Core* teachers (2.967, SD = .875) and *Middle School* teachers (2.692, SD = .9473) below but approaching 3 (*Uncertain*), there appeared to be no consensus around the notion that DARE should be either more or less open to modification. (A t-value of .930, df = 42 for the difference between the means of the two groups was not statistically significant, *p*>.05.) Over one-quarter (27%, 12/44) of the teachers were against the DARE curriculum becoming more flexible. No teacher strongly agreed with the statement, and only 9 *Core* teachers and 2 *Middle School* teachers responded with *Agree*. Forty-eight percent (21/44) of the teachers were *Uncertain*.

Are the DARE Lessons Presented in a Competent Manner?

Lesson presentation was examined by asking teachers to comment on (a) how well they thought their students understood the objectives of the DARE lessons, (b) what they thought was the relationship between the police officer and their students, and (c) how effectively they considered the lessons to be taught. Specifically, the teachers were asked to agree or disagree with each of the following statements: (a) *The objectives were clear to my students.* (b) *The DARE instructor established a good rapport with my students.* (c) *Most DARE lessons were presented in an effective manner.* Responses, recorded on a Likert-type scale with a range of 1 to 5 are illustrated in Figure 11.

Figure 11: Teachers' Responses to Lesson Presentation



Eighty-six percent of the teachers (*Core* = 87, 26/30; *Middle School* = 83%, 10/12) stated that their students understood the objectives of the DARE lessons. Mean scores for each group were above 4, the index of agreement. The question of the DARE instructor's rapport with the students evoked an even stronger response, with means for the two groups of teachers (*Core* = 4.467, SD = .7303; *Middle School* = 4.00, SD = 1.279) again exceeding 4. In fact, with 29 of the 30 *Core* teachers checking *Agree* or *Strongly Agree*, the percentage of agreement was amongst the highest percent reached (97%) for any group on any item in the teacher questionnaire. The means for the final statement in this group were lower than the means for the preceding two statements, but still well above the *Uncertain* category. Mean scores of 3.467 (SD = .9371) for the *Core* teachers and 3.833 (SD = 1.114) for the *Middle School* teachers indicated that *Core* teachers were less certain that the *Core* lessons had been effectively presented than were the *Middle School* teachers, whose mean for effective presentation approached 4.

T-values were calculated for the difference between the mean scores of the *Core* and *Middle School* students on each of the above statements. No *t*-value was statistically significant.

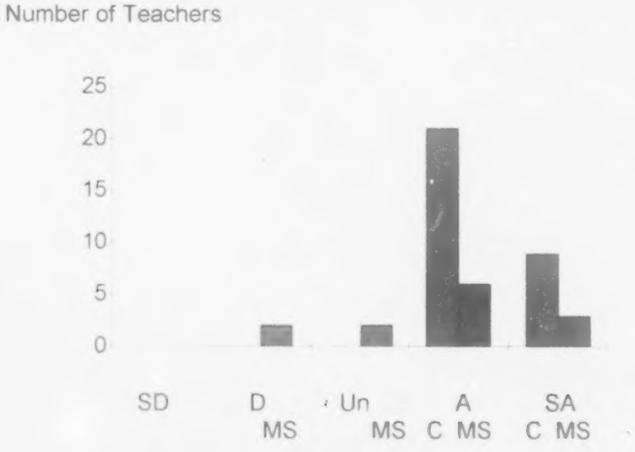
An item in the DARE student questionnaires was related to the question of whether the lessons were effectively presented. This item had the students circle the word or words which best completed the following statement, *I think that I (understood, did not understand) most of the DARE lessons*. The overall percentage of students circling *understood* was 95 (1024/1068), with the percentage of *Core* students selecting this response being 96% (559/589), compared with 95% (465/489) for the *Middle School* students. The results of the analysis of this item and the three items preceding it, suggest that DARE instructors are at least doing a very satisfactory job of presenting lessons, especially in Core Program classrooms.

Were DARE Program Students Interested in the Lessons?

Items in parents,' teachers,' and *Core* and *Middle School* students' questionnaires were designed to assess student interest in DARE. The question of student interest was posed directly to teachers and *DARE* students. Student interest was also inferred from responses on parents' and students' questionnaires to questions asking whether students discussed DARE with their parents at home and with their friends elsewhere.

Teacher responses to the statement, *Most of my students seemed to have enjoyed DARE*, are shown in Figure 12.

Figure 12: Teachers' Perceptions of Students' Interest in DARE



One hundred percent of the *Core* teachers (30/30) and 69% (9/13) of the *Middle School* teachers agreed with this statement, for an overall percent of 91. This was the only item in any of the questionnaires on which members of either a population or sub-population (*Core* teachers) were in complete agreement. The difference between the mean for the *Core* teachers (4.300, SD = .466) and the mean for the *Middle School* teachers (3.769, SD = 1.013) was statistically significant (t = 2.373, df = 41, p<.05). In response to a similar question, 87% (496/579) of the *Core* students and 46% (225/489) of the *Middle School* students said that they agreed, for an average of 68%. The z-score for the difference between these percentages was highly significant (14.13).

That interest in a school subject can be inferred from student discussions with parents and friends has been both argued (see, e.g., Curtis, 1978), and used previously in curriculum evaluations (Curtis, 1978; British Columbia Ministry of Education, 1996; Donnermeyer & Phillips, no date; Pecchia, 1991). Therefore, the researcher decided to include questions in this survey concerning such discussions that could be used as an indirect means for assessing student interest in DARE. Students were asked to circle the correct word in the following sentences: (1) *During DARE, I (talked to, did not talk to) my parents about it.* (2) *During DARE, my friends and I (talked about, did not talk about) it.* In response to the first statement, 75% (436/579) of the *Core* students and 45% (219/489) of the *Middle School* students (for an average of 61%) circled *talked to*. In response to the second statement, 60% (350/579) of the *Core* students and 45% (219/489) of the

Middle School students (for an average of 54%) circled *talked about it*. The *z*-scores for the differences between these percentages (9.68; 4.838, respectively) were highly significant, clearly indicating that a greater proportion of *Core* students discussed DARE with their parents and friends than did students in the *Middle School* program.

A Pearson product-moment *r* was run to determine the correlations among these items and the item above in which students acknowledged interest in DARE. The following *r*'s were obtained: interest and discussion with parents =.30; interest and discussion with friends =.22; discussion with parents and discussion with friends =.33. Though not very strong, each of these correlation coefficients was statistically significant (p<.001).

The item to which parents responded asked them if, beyond the initial letter from DARE introducing the program, their child discussed DARE with them at home. Seventy-nine percent (210/265) of the *Core* parents and 72% (111/155) of the *Middle School* parents (average = 76%) replied that their child did discuss DARE at home. The second part of the question asked them to identify who usually initiated the discussions. Most discussions (*Core* students = 82%; *Middle School* = 75%) were initiated by the children, with only 9% of the discussions with *Core* parents and 12% of the discussions with *Middle School* parents begun by parents. Nine percent of the *Core* parents and 13% of the *Middle School* parents were unclear as to the initiator of the discussion of DARE at home.

The percentage of *Middle School* students (45%) who acknowledged discussions of DARE with their parents was much smaller than the percentage of *Middle School* parents (72%) who said that their children had discussed DARE with them. This suggests the possibility of sample bias, and that probably the parent sample was composed of a disproportionate number of parents whose children had enjoyed the DARE program.

What Was the Teacher's Role in the DARE Program?

Teachers were asked to describe their activities while the DARE instructor was in the classroom. The choices listed in the questionnaire consisted of the following: (1) *I moved about the class assisting where I was needed.* (2) *I assisted with class management when required.* (3) *I turned over the class to the DARE instructor and tried to remain as unobtrusive as possible.* (4) *I let the DARE instructor take charge and I left the room.* (5) *I used the time for housekeeping (marking assignments, lesson-planning, etc.) activities.*

The most frequently selected activities (9/42) were numbers 4 and a combination of 1 and 2. Almost one-quarter of the teachers (7/29 *Core* teachers; 2/13 *Middle School* teachers) left the classroom when DARE lessons were being taught, while an equal proportion of teachers remained in the classroom and assisted when needed, especially with class management (5/29 *Core* teachers; 4/13 *Middle School* teachers). Four *Core* teachers and one *Middle School* teacher selected statement 3 as the best description of their activities during DARE. Others chose the following combinations of the above to describe their activities: #'s 2 and 3 (three *Core* teachers); #'s 1, 2, 3 and 5 (one *Core* teacher, three *Middle School* teachers); 4 and 5 (one

Middle School teacher); 1, 2 and 3 (one *Middle School* teacher); #'s 3 and 5 (one *Core* teacher); #'s 1, 2 and 4 (one *Core* teacher); and, for two *Core* teachers, all statements described their activities during DARE. Activities selected by *Core* teachers but not *Middle School* teachers were #2, assisted with class management (3/29), and #5, using the time for housekeeping (1/29).

Over half (56%, 24/43) of the teachers remained in the classroom during DARE lessons. Five *Core* teachers and two *Middle School* teachers, however, were out of the classroom for every DARE lesson. Six of the teachers (five *Core*, one *Middle School*) stated that they were in the classroom for "most periods." The remaining four teachers (two *Core*, two *Middle School*) stated that they were in the classroom for "very few" DARE lessons.

Class Time and DARE, Too Little or Too Much?

As described earlier, students in the Core Program received 17 hours of instruction while students in the Middle School Program received 10 hours. Since the time available for instruction was limited, the amount dedicated to DARE had to be taken away from the regular curriculum. The question asked here was whether there was time enough to accomplish the broad and very complex objectives of the DARE program, and did teachers and parents think that the time used in DARE instruction was justifiable?

To examine the first part of the above question, we asked *DARE* students if they thought 17 lessons (or 10 lessons in the Middle School

Program) were enough for the DARE program. Sixty-eight percent (391/579) of the *Core* students and 77% of the *Middle School* students replied that the number of lessons they had received was adequate. However, 31% (178/579) of the *Core* students and 22% (108/489) of the *Middle School* students responded that more lessons were required.

Graduate students were asked to respond to the following questions: (1) *Do you think that 17 lessons (modified for Middle School students to read "...the number of DARE lessons you have had") are enough for teaching the skills and strategies required for saying "No" to illegal drugs?* and (2) *Do you think that violence avoidance and resistance can be taught satisfactorily in the amount of time it's covered in DARE?* Fifty-one percent (215/422) of the *Core Graduate* students and 54% (134/250) of the *Programs Graduate* students checked "Yes" as their response to the first question, while 62% (260/422) of the *Core Graduates* and 57% (142/250) of the *DARE Programs Graduate* students responded with "Yes" to the second question. The rather sizable portions of students in both the *DARE* student groups and the *DARE Graduate* groups who thought that more time was required constitute a strong argument for extending the amount of time available to DARE in the schools, especially when what DARE manages to accomplish in a few hours of instruction is considered.

Teachers were asked their opinion concerning whether the amount of time taken for DARE instruction was an "acceptable " use of class time. Eighty-four percent (27/32) of the Core Program teachers and 78% (10/13) of the Middle School Program teachers stated that the time taken by DARE was acceptable, indicating their support of the program. Additionally, teachers were asked if the amount of time DARE was taught was enough to achieve the objectives of the program. With five teachers abstaining, the "Yes" responses of the remaining teachers (*Core* = 78%, 25/32; *Middle School* = 62%, 8/13) provided moderate support for maintaining the amount of time presently required by DARE.

Parents also were asked if they thought the amount of time taken by the DARE program was an "acceptable use of class time." Their responses were overwhelmingly in favor of DARE. Ninety percent (238/264) of the *Core* parents and 95% (149/157) of the *Middle School* parents checked "Yes."

Were Parents Involved in DARE?

Beyond the question dealt with earlier about discussions of DARE with their children, parental involvement in DARE was assessed by asking parents if they had ever attended a meeting with the DARE officer. Only 28% (75/265) of the *Core* parents and 39% (62/157) of the *Middle School* parents had attended a DARE meeting. When graduation ceremonies were added, these percentages increased to 33% and 41%, respectively. When asked why they had not attended a DARE meeting, the largest single response (160/278) was that no such meeting had been called. Fifty-seven parents replied that they had been too busy to attend a meeting, and 34 parents said their reason for not attending was that they already knew enough about the DARE program from having children enrolled in previous

DARE classes. Only five parents stated that they were not interested enough in DARE to attend a meeting.

Seventy-six percent (199/263) of the *Core* parents and 72% (113/157) of the *Middle School* parents said that they would attend a DARE workshop offered by the DARE officer. The primary reason given by the group of 107 parents who said that they would not attend such a workshop was that they already knew enough about DARE (80 parents). Only four parents acknowledged that their lack of interest in DARE would keep them away from a DARE workshop.

In response to a statement that had parents check "Yes" or "No " to a question that asked them if they knew enough about DARE to describe it to another parent, 66% (174/263) of the *Core* parents and 67% (105/157) of the *Middle School* parents checked the "Yes" category, while the remaining 33% (141/420) selected "No." The number of parents in the latter group and parents' responses to the preceding questions would suggest that many parents would like having more information about, and perhaps even more involvement in, the DARE program.

How Do Students, Teachers, and Parents Perceive Others' opinions of DARE?

Three items in the form of questions that required a "Yes" or "No" response were utilized to ascertain students' perception of the opinions others had of DARE. The first two statements asked students if they thought their teachers and their parents believed DARE to be "worthwhile." The third question asked if "most" of their friends "agree that DARE is a good program for teaching them to avoid drugs and violence."

The mean percentages of "Yes" responses to the first item for both groups of DARE students was 93%, with the *Core* students and *Middle School* students averaging 96% (563/588) and 89% (446/501), respectively. The difference between the group means was significant (z = 3.50). Percentages of "Yes" responses for the second item dropped somewhat but were still, nevertheless, quite high (*Core* = 94%, 553/588; *Middle School* = 79%, 397/501; z = 7.50). Without a doubt, these students believed that both their teachers and parents highly supported DARE. The drop in percentages of "Yes" responses was much more noticeable in the responses to the third item. While the number of *Core* students (87%, 514/588) who agreed with the statement remained high, only 261 of 501 (52%) *Middle School* students selected "Yes." The percentages of agreement on each item were arranged by *sex* and analyzed (Boys: 93%, 87%, 70%; Girls: 92%, 87%, 73%, respectively). *Z*-scores for each comparison were not significant.

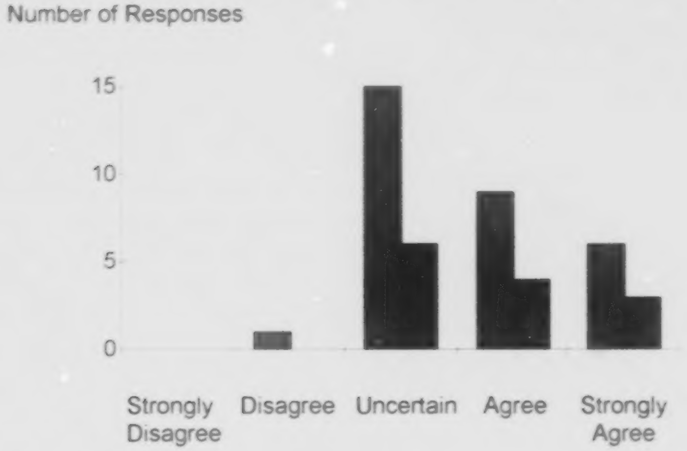
The difference between the *Core Graduate* students and the *Programs Graduate* students in their perceptions of their peers' opinions of DARE as a "good program for teaching students to avoid drugs and violence," was very significant (z = 11.47), although the average percentage (63%, 421/672) still implied that the majority of students agreed with the statement. While 73% (306/422) of the *Core Graduate* students stated that most of their friends thought that DARE was a good program, only 46% (115/259) of the DARE *Programs Graduate* students agreed. The percentage of agreement among girls (67%, 230/344), was significantly greater ($z = 2.25$) than that for the boys (58%, 191/328).

Students also completed a question, related to the above, that asked them if they thought that their parents were interested in what they had learned in DARE. A strong majority of *Core* students (88%, 516/588) and a moderate majority of *Middle School* students (62%, 312/501) believed that their parents were interested in DARE content (overall mean percentage = 76, 828/1089, $z = 13.0$). The lower percentage of *Middle School* students who responded "Yes" to this item may have reflected the smaller proportion of *Middle School* students who had discussed DARE with their parents.

Despite the discrepancy between the perceptions of *Core* and *Middle School* students of their parents' support for and interest in DARE, responses to each of the preceding items still implied a clear majority agreeing to each statement. There was adequate reason, therefore, to conclude that DARE students believed that their programs, for the most part, were widely accepted and supported. However, it appeared that some students believed that although their parents supported DARE, they were less interested in what students learned in the program.

The majority of teachers (78%, 35/45) believed that most teachers, including those whose students did not have DARE this year, supported DARE. The difference in percentage of agreement between *Core* teachers (75%, 24/32) and *Middle School* teachers (85%, 35/45) was not statistically significant. As can be seen in the figure below, teachers were less sure of parents' attitudes toward DARE.

Figure 13: Teachers' Responses to the Statement, *The parents of my students supported DARE.*



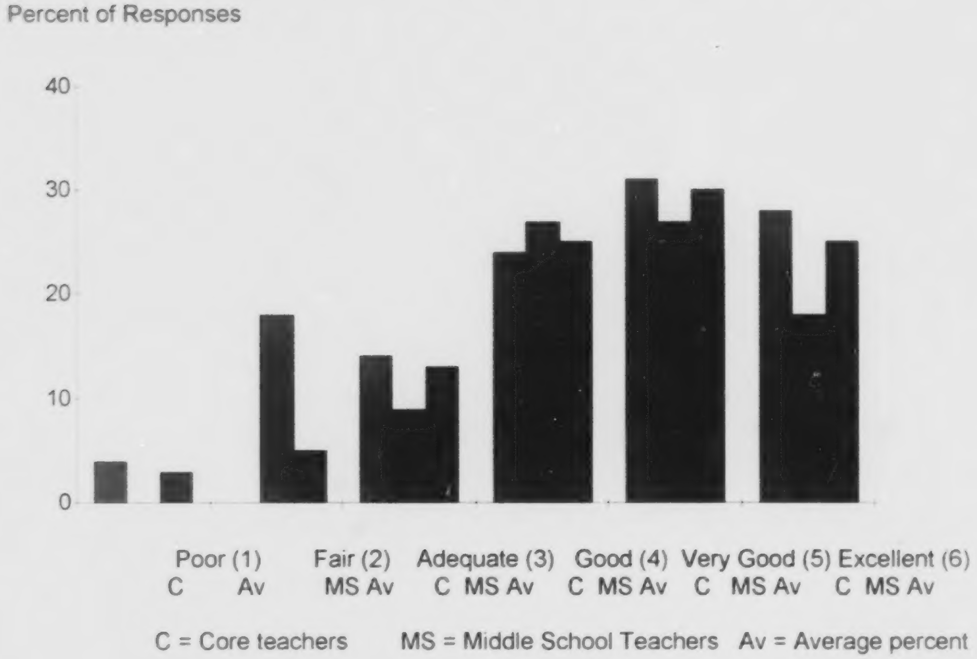
The mean score for the Core teachers (3.645, SD = .8386) was not statistically greater (t = .449, df = 42, p>.05) than the mean score for the *Middle School* teachers (3.769, SD = .8321).

Clearly, teachers must have had little contact with the parents, as least as it pertained to the DARE program. Parents overwhelmingly (93%, 391/421) believed that DARE was supported by "most parents." Support for this belief was not related to *program* (*Core* parents = 92%; *Middle School* parents = 92%) or the *sex* of the child (parents of boys = 92%; parents of girls = 92%).

How Good a Program do Teachers Think DARE Is?

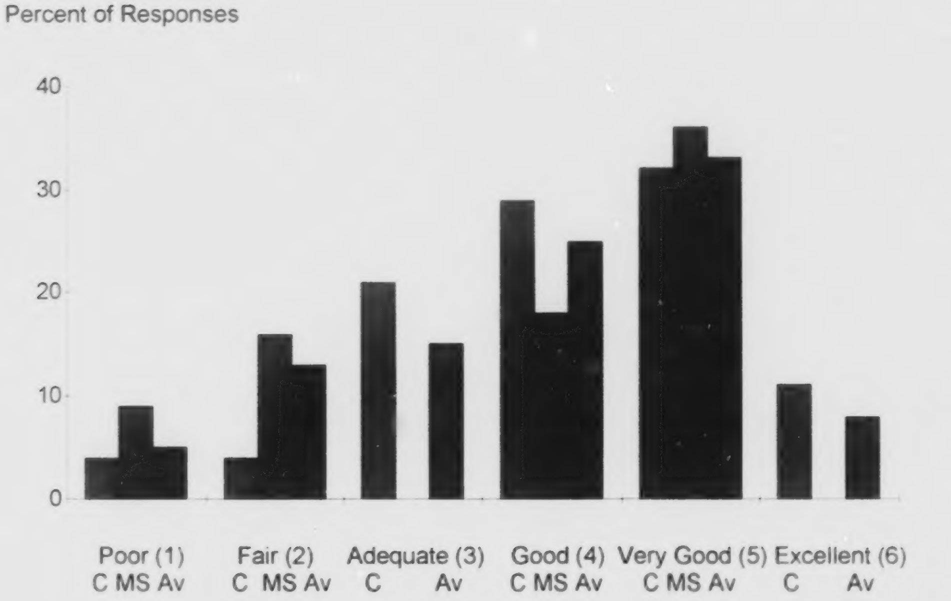
Teachers rated DARE as a drug-education program and as a violence-avoidance program on a scale that ranged from *Poor* (1) to *Excellent* (6). Eighty percent (32/40) of the teachers (*Core* teachers = 83%, *Middle School* teachers = 72%) rated DARE as at least a good drug-education program. Ninety-eight percent (37/40) considered DARE to be at least an *adequate* drug-education program. The average rating for *Core* teachers (4.621, SD = 1.236) was not statistically different (*t* = .967, *df* = 38, p>.05) from the average rating for the *Middle School* teachers (4.142, SD = 1.401). Figure 14 illustrates the percentage of responses in each rating category.

Figure 14: Teachers' Ratings of DARE as a Drug Education Program, By Percent



DARE was less well accepted as a violence-avoidance program, though the majority of teachers (67%, 26/39) rated it at least good. *Core* teachers = 72%, *Middle School* teachers = 54%). When the standard is dropped to "adequate," this percentage changes to 81% (32/39). The mean rating for Core teachers (4.142, SD = 1.208) was beyond the *Good* criterion, while the mean rating for the *Middle School* teachers (3.363, SD=1.5667) was closer to the "adequate" criterion, but still, nevertheless, implying acceptance of DARE as a violence-avoidance program. Figure 15 illustrates the percentages of responses for both groups of DARE teachers.

Figure 15: Teacher's Ratings of DARE as a Violence-Avoidance Education Program, By Percent.



C = Core Teachers MS = Middle School Teachers Av = Average percent

Should DARE Be Continued in West Vancouver Schools?

Parents, teachers, and all student groups were asked whether they thought DARE should continue to be taught in West Vancouver.

Parents. The question to parents was, *Do you recommend that DARE in its present form be continued in West Vancouver schools?* The response to this question showed strong support for DARE, with 92% (244/264) of the *Core* parents and 89% (140/157) of the *Middle School* parents recommending that DARE (overall response = 91%) be continued. Furthermore, as the question stated, a "Yes" response implied support for DARE as it is presently taught in West Vancouver schools. Of the 421 parents who completed questionnaires for this survey, only 18 (4%) disagreed that DARE should be continued. Nineteen (5%) of the parents left this item blank. If the latter questionnaires be excluded from the analysis, the overall response becomes 96%, with *Core* parents increasing to 96% and *Middle School* parents increasing to 96%, also. These percentages imply very strong parental support for the DARE programs in West Vancouver schools.

Teachers. Since the majority of teachers considered DARE to be at least an "adequate" drug-education and violence-avoidance program, it was reasonable to anticipate a high recommendation for its continuance in West Vancouver. The question teachers responded to was the following: *Do you think that DARE should be taught in your school again next year?* Teachers responded strongly in support of the DARE program being continued in their school. Ninety-one percent (29/32) of the *Core* teachers and 92% (12/13) of the *Middle School* teachers answered "Yes" to this question. Two *Core* teachers disagreed, and one *Core* teacher and one *Middle School* teacher left the question unanswered.

DARE Students. Both *Core* and *Middle School* students responded to the question, *Do you think that the DARE program should be taught in your school again next year?* Seventy-four percent of the students checked "Yes", with the percentage of *Core* students (83%, 487/588) being significantly greater (z = 6.923) than the percentage of *Middle School* students (65%, 324/501). Sex of student was not a factor in their response: 74% (398/540) of the boys and 75% (413/549) of the girls agreed that DARE should be taught in their schools the coming year. The difference between the percentages of “Yes” responses was not significant (z = .3703).

Graduate Students. Since these students had only experienced DARE in the elementary grades, and at the time of this study the high school program was not taught in West Vancouver, the question to the *Graduate* students was, *Do you think that DARE should continue to be taught in West Vancouver elementary schools?* For the first time in this survey, the average percentage of *Graduate* students responding positively to an item exceeded that of the *DARE* students. Ninety-one percent (384/422) of the *Core Graduate* students and 85% (213/250) of the *Programs Graduate* students (average = 89%, 597/672) responded “Yes.” The percentage of *Core Graduate* students acknowledging “Yes” to the question was significantly greater than that of the *Programs Graduate* students (z = 2.400). Contrary to the findings above, for these students *sex* was a factor (z = 2.083), as 86% (283/328) of the boys and 91% (314/344) of the girls agreed that DARE programs should continue in their schools.

Do Students Make Use of The Skills They Learned In DARE?

Certainly one of the most important questions asked about DARE is whether students actually use the skills that they were taught in DARE. There is strong evidence that they leave the DARE programs fully intending to do so. Eighty-three percent (907/1088) of the *DARE* students (*Core* = 91%, 537/588; *Middle School* = 74%, 370/500; *z* = 7.391) in this study stated that they were not likely to use drugs because of what they had learned in DARE. And, the percentages of boys (84%, 454/539) and girls (83%, 453/549) who made this claim were almost equal. Toward the end of their questionnaires, when asked whether they thought they would be able to say "No" to drugs, an overwhelming number (1026/1068, 96%) said they thought they would. As with the preceding question, a greater proportion (*z*=2.521) of *Core* students (564/579, 97%) than *Middle School* students (462/489, 94%) agreed with the statement; however, the percentages of boys (96%, 499/522) and girls (97%, 527/546) were similar. The numbers were high, and it was noted that only three *Core* students and twenty *Middle School* students admitted that they might not be able to refuse drugs. Nineteen students chose not to answer the question.

A parallel question asked the students if they would attempt to use non-violent ways to handle a situation that was potentially dangerous. Eighty-two percent (873/1068) of the students (*Core* = 85%, 490/579; *Middle School* = 78%, 383/489; z = 3.233) said that they would. For this question, *sex* was a factor and the percentage of girls (84%, 460/546) who said they would resort to non-violent means to manage a situation that could become dangerous was significantly greater (*z* = 2.170) than the percentage of boys (79%, 413/522).

How their determination to resist drugs and violence serves them when they encounter situations where one or both exist was the question put to the *Graduate* students. Specifically, these students were asked, *Since you graduated from DARE have you been in a situation where you had an opportunity to use drugs (including alcohol)?"* Then they were asked to state whether they had used what they had learned in DARE to resist the drugs, and, finally, those who responded that they had not done so, were asked to either select from several statements or write their own reason explaining why they had not. A similar question pertained to potentially violent encounters.

Eighty-two (19%) of the *Core Graduate* students and 178 (72%) of the *Programs Graduate* students acknowledged that they had been in situations where drugs or alcohol were available. Of these students, 57% were boys and 43% were girls, mostly students in Grade 8. One hundred and seventeen students (*Core Graduate* students = 50/82, 61%; *Programs Graduate* students = 67/178, 38%), or 45%, had said they had used what they had been taught in DARE to avoid taking drugs or drinking alcohol.

When the remaining students were asked to explain why they had not used what they had learned in DARE, they gave a diversity of answers. The reason given most frequently (76 times; 7 by *Core Graduate* students, 69 by *Programs Graduate* students) was that the student actually wanted to take the drugs or the alcoholic drink. The next most frequently mentioned reason (24 times, 5 by *Core Graduate* students, 19 by *Programs Graduate* students) was that the student had found his/her own solution to avoiding the taking of drugs or alcohol. Eight students (4 *Core Graduates* students and 4 *Programs Graduate* students) wrote that they did not use what they had learned in DARE because they thought it would not work. Not wanting to appear foolish and be made fun of was the reason five students (3 *Core Graduate* students and 2 Program Graduate students) refrained from using DARE strategies. Three students (2 *Core Graduate* students and 1 *Programs Graduate* student) did not use what they had learned in DARE because they did not want to be rejected by their friends, and three *Programs Graduate* students took drugs because they wanted to and also because they feared rejection by friends. Two students (1 *Core Graduate* student and 1 *Programs Graduate* student) succumbed because they "just didn't care." All other reasons were individual and mostly consisted of combinations of the above. When these reasons were organized by *sex*, it was revealed that almost equal percentages of boys (53%, 42/80) and girls (55%, 34/62) had taken drugs or alcohol simply because they had wanted to do so. Twenty-seven percent (17/62) of the girls and 9% (7/80) of the boys had found their own solutions for avoiding drugs and alcohol. Six of the students who believed that DARE strategies would not work for them were boys. The two students mentioned above who took drugs/alcohol because they "just didn't care" were both boys.

Students were asked similar questions concerning how they acted when confronted with situations where there was the likelihood of violence. The analysis of their responses suggested that, at least for the *Core Graduate* students, the probability of encountering violent situations was greater than that of encountering situations where drugs or alcohol were available. Fifty percent (321/641) of the students (*Core Graduate* students =

42%, 169/407; *Programs Graduate* students = 65%, 152/234) had been involved in situations where violence was likely to occur, and of these 47% (150/321; *Core Graduate* students = 51%, 86/169; *Programs Graduate* students = 43%; z = 1.455, n.s.) were able to use what they had been taught in DARE, either to remove themselves from danger or eliminate it. This analysis also revealed that a significantly greater percentage of boys (63%, 198/316) than girls (38%, 123/325) confronted violence in West Vancouver; albeit, girls (59%, 73/123) appear to be more likely (z = 3.509) to use DARE strategies than boys (39%, 77/198).

The most frequently mentioned reason for not using DARE strategies to avoid violence, was, according to 36 students (*Core Graduate* students = 7, *Programs Graduate* students = 29), that they enjoyed fighting. The next most frequently mentioned reason (35 times, 22 by *Core Graduate* students, 13 by *Programs Graduate* students) was that when the situation arose there simply just was not enough time to use any strategies and they had no alternative but to defend themselves. Twelve students (10 *Core Graduate* students, 2 *Programs Graduate* students) became involved in violence because they did not want to let friends down. Eleven students (7 *Core Graduate* students, 4 *Programs Graduate* students) rejected DARE strategies because they did not want to appear to be afraid. Some students (7 *Core Graduate* students, 3 *Programs Graduate* students) did not use DARE strategies for avoiding violence because they thought they would not work. As with drugs and alcohol above, a number of students (6 *Core Graduate* students, 2 *Programs Graduate* students) were able to find their own solutions and therefore did not have to resort to what they had learned in DARE. The remaining students found individual reasons, mostly combinations of the choices in the questionnaire, for not applying what they had learned in DARE.

Sex appeared to be a factor in the reasons why these students chose not to avoid potential violence. Of the 36 students who stated that they enjoyed fighting, 34 were boys. More boys (8) than girls (3) were willing to encounter violence because they did not want to be seen as being afraid and because they did not want to let their friends down (8 boys, 3 girls). More boys (8) than girls (2) also thought that what they had learned in DARE would not work. However, 38% (19/50) of the girls and only 13% (16/120) of the boys became involved in violence because it occurred so quickly it could not be avoided. *Sex* seemed to be a less obvious factor in other reasons given for ignoring DARE strategies.

One hundred and seventeen encounters with drugs and alcohol and 150 potentially violent situations were successfully managed because students utilized the skills they learned in DARE. Other students chose not to use these skills because, for the most part, they either wanted to take drugs or alcohol, or they enjoyed fighting. While statistics here may not properly demonstrate the significance of these numbers, the importance of DARE to the 367 students and their families would likely be considerable.

Is School a Factor in DARE's Effectiveness?

This study was not intended to compare DARE outcomes by school. Nevertheless, a question important to the study was concerned with whether *school* was a factor in DARE's effectiveness. To this end, the students' scores on the *DARE Attitude Scale (DAS)*, which the researcher contends can be used as a general measure of interest toward DARE, were grouped and analyzed by *school*. Prior to this analysis, ANOVA was used to test for differences among the programs and the t-test for independent means was used to test for differences between the mean scores of the boys and girls in each of the four subject groups.

An *F*-ratio of 100.38 (*df* = 3,1756; *p*<.001) for the means of the four program groups suggested significant differences among the mean scores of the groups on the *DAS*. Post hoc analysis using Tukey's tests revealed significant differences between each group. That is, the mean for the *Core* group was significantly larger than the means for the other three groups, *Core Graduate* was significantly larger than *Middle School* and *Programs Graduate,* and *Middle School* was significantly larger than *Programs Graduate* (see means for each group in Table 15, below). Furthermore, *t*-values for the mean scores of boys and girls in the *Core, Middle School*, and *Core Graduate* groups were not statistically significant. However, the difference between the mean scores of the boys (47.95, SD = 13.30) and of the girls (52.72, SD = 10.19) in the *Programs Graduate* group was significant (*t* = -3.171, df = 248) beyond the .01 level. Because of these findings, individual ANOVA's were run with the data from each program group to determine whether the mean scores on the *DAS* differed by *school*. Since only three high schools were included in the project (and *sex* appeared to be a factor in their scores on the *DAS*), program comparisons were made only among the 13 elementary schools.

An *F*-ratio of 6.532 (*df* = 12,575) for the *Core* students was statistically significant ($p<.001$), implying that there was a difference among the means of the schools. An *F*-ratio of 5.859 (*df* = 12, 488) for the *Middle School* means arranged by *school* was also statistically significant ($p<.001$). Additionally, *F*-ratios for the *Core Graduate* and the *Programs Graduate* means arranged by *school* were 8.306 (*df* = 9, 411) and 7.311 (*df* = 2, 247) and were statistically significant ($p<.001$). Significant differences occurred in each of these analyses, implying that *school* was a factor in students' responses to *DAS*. However, since individual schools were not to be compared, differences revealed by post hoc tests have not been reported here.

The means and standard deviations for the students in each school are reported in Table 15. Schools are numbered, but in order to prevent comparisons they are neither named nor listed in alphabetical order. Additionally, the numbers of students are not given since they could be used to identify particular schools.

Table 15: Mean Scores on the *DARE Attitude Scale* Arranged by School and Program

School	DARE Students		Graduate Students		Grand Mean
	Core	Middle School	Core Graduate	Programs Graduates	
1	60.04	56.35	54.37		57.47
2	65.31	58.50	60.43		61.57
3	59.61	55.86	62.49		60.10
4	59.45	52.48	49.94		53.96
5	63.78	54.41	57.56		58.70
6	61.18	53.63	62.88		59.05
7	64.43	56.03	56.98		60.21
8	62.26	59.88			60.93
9	65.53	54.12	61.24		60.14
10	54.69	58.61			57.25
11	63.70	66.17			65.02
12	63.73	50.75	58.08		57.72
13	65.00	55.00	55.21		58.61
14[1]				51.02	51.02
15[1]				55.33	55.33
16[1]				45.02	45.02
Mean for Group	**62.32**	**55.80**	**57.68**	**50.28**	**57.64**

[1] High school Grade 8 classes

Scores on the *DAS* can range from 15 to 75. Scores above 60 (average for *Agree*) imply acceptance of DARE, while scores below 30 (average for *Disagree*) imply negative attitudes toward DARE. As can be seen in Table 15, only the *Core* Program had a mean above 60 on the *DAS*. However, a number of individual program mean scores within schools met or exceeded the criterion for *Agree*. The mean score for all groups and schools on the *DAS* was 57.64, which closely approached *Agree*. Two schools (#4, *Core Graduates* and #16, *Programs Graduate*) each had one program with a mean score below 50, which implied rather weak acceptance of DARE.

DARE parents responded to a scale (prepared by the researcher for this study) similar to the *DAS*, but containing just 5 items. Scores were arranged by school and treated with ANOVA to determine if parents' mean

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scores on this instrument were related to school. The mean scores for schools varied from a low of 18.78 (SD = 4.116) to a high of 21.00 (SD = 2.866), for an average mean score of 20.206 (SD = 2.822). This average mean score was above 20, the criterion for *Agree*. No score approached 15, the criterion for *Uncertain*. An $F_{13,404}$ of 2.038 for *school* was statistically significant ($p<.05$), implying that *school* was a factor in parents' responses..

When the schools were ranked according to the mean scores for parents on this instrument and the average of the means of the *Core* and *Middle School* students on the *DAS*, the Spearman rank correlation coefficient was computed for the degree of relationship between the two sets of means. A Spearman's *rho* of .43 for the relationship was not statistically significant.

PART B: The Open-ended Items

Procedure

Open-ended items were included after the closed-response items on each questionnaire. These items permitted respondents to express in their own words, unrestricted by format or context, any opinions or concerns that they had pertaining to DARE, and to explain or augment their answers to the closed-response items. The researcher estimates that at least half of the parents and three-quarters of teachers responded to these items. The proportion of responses from students was similar to that of the teachers, with perhaps slightly less than three-quarters of the student questionnaires containing comments. Respondents' written comments were carefully copied and coded, and discernible patterns were noted.

It was not possible to include every comment from each respondent in this discussion. Comments have been included when they occurred frequently and, therefore, seemed to be a general concern of the particular group of subjects. Occasionally, comments that the researcher judged to be particularly insightful or considered to be especially relevant to the study were also included here.

Comments From Parents

The open-ended items on the parents' questionnaire read: (1) *What changes, if any, would you like to see in DARE?* and (2) *In the space below, please state any opinions you would like to express about DARE.*

Changes to DARE

The suggestion here that most frequently occurred on the parents' questionnaires was that parents wanted and needed to be more closely involved in the DARE program. They wanted to be informed of individual lessons as they were taught, and they wanted to receive suggestions of what they could do with their children to reinforce what they had learned in DARE. Very few comments in this area were expressed as criticisms of DARE. Indeed, parents stated that they wanted to be partners with the police officer and the school in making DARE an effective anti-drug, anti-violence education program.

Many parents commented that they would have appreciated an "orientation to DARE" meeting with the DARE officer and teachers prior to their children entering the DARE program. During this meeting, they would have expected to be informed of the objectives and content of the program, and they would have expected to learn about drug and violence problems in the school and community and what their roles as parents should be. Several parents requested an orientation meeting in Cantonese or Mandarin.

The tenor of parents' responses seemed to imply a general anxiety that drugs and violence were becoming such significant threats that not only should DARE be introduced as a formal program earlier than Grade 5, but that there should be more grades at which DARE is taught. Parents specifically identified the need for DARE in the high school grades.

Besides becoming more involved themselves, parents recommended that DARE should have included more teachers and school counselors. Parents recognized the relevant background and expertise that the police officer brought to the program, but they said they would like to have had more school personnel involved in the actual instruction, if for no other reason than to have indicated to the students that illegal drug use and violence were a community concern and not just a police matter. These parents wanted a partnership of the police and the school to be more clearly perceived by the students.

Though a large number of parents acknowledged that no changes were required in the DARE program--beyond, perhaps, the need to include female instructors--some parents offered suggestions for DARE's teaching strategies, content and materials. For example, a number of parents suggested that DARE instruction should consist less of direct teaching and more of open discussions in which children are encouraged to express opinions. These parents contended that DARE was presented in too restrictive a manner and students were not motivated to think for themselves.

Parents recommended that a greater focus be placed on violence, which they perceived to be a threat even to very young children. They also suggested the addition of lessons that discouraged bullying and taught children ways to manage or avoid situations where bullying was likely to occur.

Some parents criticized the use of American materials in West Vancouver schools and requested that Canadian-produced materials--in particular, DARE booklets, videos, and films--be used in their stead. Some parents recommended using materials that more authentically illustrated the reality of drug use. Several of these recommendations included photographs of addicts, automobile accidents, and, even, visits to the local jail. In a somewhat similar vein, ex-drug addicts who could discuss the negative consequences of drug use were suggested as appropriate guests in DARE classrooms, particularly at the high school level. Role models from the high school were also seen as suitable guests in DARE classrooms.

Occasionally, comments were made about the need to regularly upgrade DARE information and materials, and some parents saw the content of the Middle School program as "repetitious", that is, just a repeat of the Core Program the children had taken two years previously. Others stated that the materials they had seen were "childish" and too immature for students in Grade 7. Several parents who had attended DARE graduation exercises commented that many students felt excluded because only a few were selected to read their essays. They recommended that attempts should be made to include all children in the graduation.

General Comments about DARE

By far, parents' statements here were favorable toward the West Vancouver Police Department and the DARE Program. Numerous parents expressed their gratitude to the WVPD and to individual DARE instructors for the program their children had received. All DARE instructors were mentioned by name, with comments about the relationships they had established with the students and the respect their children now had for the police. A number of parents stated that their children considered their DARE officers to be friends that they could go to when in trouble. Some parents referred to DARE officers as positive role models for their children. DARE officers were also credited with helping children develop a positive regard for authority. And, some parents praised DARE officers who spent time with their children outside the DARE classroom. Clearly, police involvement in schools through DARE was seen as a very positive measure, and something that should be continued.

Although several parents argued that drugs and violence were topics of discussions between parent and child in the home, and not the prerogative of the police or the school, other parents conceded that prior to DARE they had had little knowledge of drugs or violence and were, therefore, not competent to discuss these topics with their children. DARE lessons brought home by their children served to inform them as well, and, according to a number of parents, made them more able to engage in worthwhile discussions with their children. A number of parents agreed that as a result of DARE their children would now be able to make appropriate choices regarding drug use and violence. Throughout the parents' many comments were statements that simply said, "Thank you for DARE."

Comments from Teachers

Teachers were asked two open-ended questions: (1) *As briefly as possible, describe what you see as being the role of the classroom teacher in the DARE program.* and (2) *What changes, if any, would you make in the DARE program taught in your school?*

The Teacher's Role in the DARE Classroom

The role teachers played during DARE instruction was, according to a number of teachers who responded to this item, not clearly defined, and it appears that they were left to decide for themselves what they should do. Several teachers described themselves as "facilitators" whose job was to support the police officer when needed. Their primary function in this capacity was to deal with behavior problems when and if they occurred and to keep students on task and working. These teachers characterized their behavior during DARE lessons as unobtrusive, and emphasized they would not interrupt lessons without sufficient cause. Moreover, some teachers suggested that an important part of their responsibility as teachers in DARE classrooms was to demonstrate a positive attitude toward the DARE officer and the program, as a means of confirming the program to the students.

Among the duties most frequently mentioned by DARE classroom teachers was their responsibility to reinforce DARE lessons by providing students with opportunities to apply what was taught in DARE in other subject fields and in other aspects of school life.

Changes to DARE

Thirty-one of the forty-five teachers responded to this item, and nine of these teachers recommended that no changes be made to the DARE program. Several pages of suggestions for change were recorded and coded from the teachers' questionnaires.

Perhaps the change recommended most often had to do with the need to increase the interaction between the DARE officer and the classroom teacher, who, it appears, sometimes felt removed from the program. In an attempt to ameliorate this situation, teachers requested a more active part in the program and, in addition, proposed the development of materials that they could use in their own follow-up lessons. Furthermore, they recommended that parents be given information that would help them to support the DARE program at home.

The importance of reducing the amount of direct teaching and increasing the number of "hands-on" activities was emphasized by teachers as a means for increasing student interest in DARE. These teachers contended that DARE instructors should be permitted to adapt the program to suit the student characteristics of their classes. Some teachers also advocated that more attention be given to developing self-esteem and to teaching strategies for managing anger—opinions not shared by several teachers who argued that DARE should focus on drug education alone, and other aspects of the program should be left up to the Career and Personal Planning Program (CAPP) curriculum. A number of teachers expressed the opinion that more attention should be given to the legal implications of using illegal drugs and alcohol. Teachers also recommended that students be taught more "realistic" ways to say "no" to drugs.

That some of DARE's materials, and in particular the videos, seemed dated and needed to be revised concerned teachers. These and other teachers objected to materials they considered to be too immature for their students. Some teachers also complained that the practice of rewarding or encouraging students with what they considered to be bribes should be reduced.

Although what may appear in the preceding comments to be a critical attitude toward DARE and a lack of support for the DARE program, the researcher believes that such was not the case. These teachers were simply responding to a question that required them to consider changes to DARE, the implication being that any curriculum, including DARE, can be improved. It is unlikely that any of the suggestions above, if accepted, would threaten the integrity of the DARE program in any way. Furthermore, teachers expressed strong support for the program elsewhere in the questionnaire.

Comments from Students

Students were asked to write their responses to the following questions: (1) *What do you think was the best part of DARE?* (2) *Was there anything you did not like about DARE?* (3) *If you could, what would you change about DARE?*

The student response rates to the three questions are given in Table 16. The overall average response rate was 75%, which implied significant interest in these questions among the several student groups surveyed. These response rates were sufficiently high enough to be representative of the various groups. The tables below summarize the comments on over 1,300 questionnaires.

Table 16: Students' Response Rates to Open-ended Items

Percentages of Students Who Responded to the Open-ended Items			
Group	**What students liked best.**	**What students liked least.**	**What students would change.**
DARE			
Core	80%	76%	76%
Middle School	75%	76%	75%
Graduates			
Core	82%	74%	77%
Programs	65%	74%	62%
Average Percent	76%	75%	73%

Students' Selections of the Best Part of DARE

As can be seen in Table 17, students chose the games played in DARE as the best part of the DARE program. "Games" was followed closely by "skits". Since both of these engaged the students in active participation in

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group activities, these selections implied that, on the whole, students enjoyed DARE most when they were personally involved in the learning.

The value these students placed on what they learned from DARE can be inferred from their third choice in terms of what they thought was the best about DARE. Almost a quarter (268/1140) of the students who responded to this item stated that the best part of DARE for them was learning to say "no" to drugs, a strong indication that the program impacted the lives of a large number of students. The fact that the *Graduate* students, who had a year's time to reflect on what they learned and did in DARE, selected this as the best part of DARE seems to be clear evidence of the program's influence on students.

Table 17: The Best Part of DARE

Choices	Rank	DARE		Graduates	
		Core	Middle School	Core	DARE Programs
games	1 (299)	2 (108)	1 (140)	4 (44)	6 (7)
skits	2 (284)	1 (110)	3 (97)	2 (54)	2 (23)
learning to say ?"No"	3 (268)	3 (84)	4 (71)	1 (69)	1 (44)
videos	4 (206)	4 (63)	2 (98)	7 (26)	4 (19)
role-playing	5 (173)	7 (48)	5 (67)	5 (40)	5 (18)
graduation	6 (108)	5 (53)	[1]	3 (42)	[2]
prizes	7 (85)	11 (14)	[2]	6 (33)	3 (20)
role-models	8 (65)	6 (49)	[2]	10 (11)	[2]
the police officer	9 (47)	8 (27)	[2]	8 (13)	[2]
DARE box	10 (40)	9 (21)	[2]	7 (15)	[2]
police stories	11 (36)	10 (17)	6 (12)	[2]	[2]
DARE Book	12 (31)	[2]	[2]	9 (12)	[2]

[1] Not part of the Middle School Program
[2] Selected by fewer than 10 students

The only other selection elected by more than two hundred students was "watching and discussing videos," and of the remaining selections, "role-playing," alone, was chosen by 10% or more of the students. The *DARE*

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Book, the last item on the list in Table 17, was chosen by slightly less than 3% (2.3%) of the students.

Prior to considering students' selections of what they liked least in DARE and what changes to DARE they think should be made, it is important to note the numbers of respondents who found nothing in DARE they disliked and who recommended that the program be continued in its present form. This information is given in Table 18.

Table 18: Percentages of Students (by Group) Entirely Satisfied with the DARE Program

Group	Students who found nothing they disliked in the DARE program.	Students who would make no changes to the present program.
DARE		
Core	66% (298)	46% (208)
Middle School	42% (159)	25% (93)
Graduates		
Core	61% (189)	35% (115)
DARE programs	30% (55)	15% (24)
Average % (Total #)	53% (701)	34% (440)

Students' Selections of What They Liked Least about DARE

Table 19 records what students liked the least about the DARE program. As might have been anticipated, "homework" was selected as the aspect of DARE that students most disliked. Often in their responses, students commented that DARE homework competed with the time required for assignments in their academic subjects. Since they received no mark for DARE, some students thought all assignments should be completed during class time. They also complained that failure to complete DARE assignments in the Core Program resulted in not being allowed to graduate from the program.

As their second choice of what they liked least about DARE, students said that DARE was "boring." Students supported their selection with comments that the instructor lectured too much, that some exercises and videos were childish, and, in the case of *Middle School* students, that they had covered the material earlier in the Core Program.

Whether the remaining items of what students liked least about DARE should have been included in the following table is arguable. The DARE Book, ranked 4th in the list, was designated by just 3% of the students, and the comment that DARE was "unrealistic" was found on only 11 of the over 1,300 questionnaires. It should be noted that even "homework" was selected by only 10% of the students.

Table 19: What Students Liked Least About DARE

Choices	Rank	DARE		Graduates	
		Core	Middle School	Core	DARE Programs
homework	1 (147)[1]	1 (33)	1 (97)	2 (15)	[2]
It was boring	2 (114)	2 (24)	2 (55)	3 (13)	1 (22)
DARE Book	3 (42)	4 (17)	5 (15)	[2]	[2]
the essay	4 (33)	5 (15)	[2]	1 (16)	[2]
Too repetitious	5 (32)	[2]	4 (18)	[2]	[2]
the police officer	6 (31)	[2]	3 (23)	[2]	[2]
Not enough time	7 (27)	3 (20)	[2]	[2]	[2]
immature videos	8 (17)	[2]	[2]	[2]	[2]
skits	9 (16)	[2]	[2]	[2]	[2]
It was unrealistic	10 (11)	[2]	[2]	[2]	[2]

[1] Represents about 10% of the respondents
[2] Selected by fewer than 10 students

What Students Would Change About DARE

Based on their responses to the preceding question about what they liked least about DARE, one would have fully expected to see either "less homework" or 'more interesting lessons" at the top of a list of changes

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students would make to the DARE Program. Such, however, was not the case; instead, the recommendation that DARE Program be made longer topped the list. Whether one interprets this response to be evidence of student interest in DARE or that students thought that a longer DARE was needed to accomplish the objectives of the program, it seemed to suggest that for many students DARE was a relevant part of their education.

Table 20: Changes Students Would Make To the DARE Program

Choices	Rank	DARE		Graduates	
		Core	Middle School	Core	Programs
Make DARE longer	1 (189)	1 (65)	2 (63)	1 (51)	3 (11)
Make it more fun	2 (134)	3 (24)	3 (62)	2 (21)	1 (20)
less homework	3 (92)	6 (17)	1 (68)	[2]	[2]
more games	4 (57)	2 (28)	5 (15)	[2]	[2]
more skits	5 (51)	7 (12)	4 (17)	[2]	2 (16)
more videos	6 (37)	5 (21)	[2]	[2]	[2]
change DARE Book	7 (35)	4 (23)	[2]	[2]	[2]
more drug information	8 (25)	[2]	[2]	4 (10)	4 (10)
make DARE more realistic	9 (24)	[2]	[2]	3 (11)	[2]
more role-play	10 (21)	[2]	[2]	[2]	[2]
remove essays	11 (14)	[2]	[2]	[2]	[2]
more prizes	12 (12)	[2]	[2]	[2]	[2]
Change song	13 (11)	[2]	[2]	[2]	[2]
less repetition	14 (10)	[2]	[2]	[2]	[2]

[2] Selected by fewer than 10 students.

in the foregoing table, less homework and more fun were recommended by 10% and 7% of the respondents, respectively; the remainder, by even smaller percentages. Based on these small percentages, the extent to which these suggestions should be considered substantive concerns is a matter of opinion.

Additional Comments from Students

A number of critical comments that have implications for improving the quality of instruction in DARE classrooms were observed on student questionnaires. A few of the more relevant are presented here, for consideration.

> *I would make sure that everyone had a chance to do role-playing if they wanted to and not just 1 or 2 people.*
>
> *I didn't like the way my school crammed all the lessons into a couple of weeks."*
>
> *Sometimes the lessons got a bit boring. I think that we should have switched the groups around each time."*
>
> *I didn't like that one of my classmates got more attention than me.*
>
> *I thought that the constable talked for too long and we got confused.*
>
> *I think that I learned the most from skits because I was in them.*
>
> *I worked hard on my essay and was not chosen to present it. It's unfair.*
>
> *I did not like it when he picked good essays and bad essays, it made me feel mad because I tried so hard on it.*
>
> *Sometimes we were pressured into writing something or saying something you may not agree with.*
>
> *You should teach us things that would apply to us now, not later because later it could be too late.*
>
> *There was no time for the students to talk to the policeman alone.*
>
> *I liked it when we had time outside the class with the officer.*
>
> *The timing was horrible. DARE should be taught at the beginning of the year not at the end when people need classes for exams.*
>
> *Show the kids the consequences, not just tell them.*

> *He made us feel hopeless, at least give us a little hope.*
>
> *I like the role plays because they help us handle ourselves in a real situation.*
>
> *I would like more outdoor activities to make kids think of the policeman as a friend.*
>
> *Try not to keep repeating things we already know.*
>
> *Maybe more lessons or more time so we don't have to rush all the lessons.*
>
> *I think dare should be taught in smaller groups.*
>
> *I would make grad longer so everyone could read their essays.*
>
> *It could have been a little bit more serious.*
>
> *Make it more mature.*
>
> *Make it more interesting, stop repeating the same thing over and over.*
>
> *Shouldn't be condescending toward students.*
>
> *I like to act out real-life situations rather than do a lot of stuff in a workbook.*

Taken as a whole, these comments and others similar to these, implied that students prefer DARE to be taught by an instructor who is friendly and available, treats all students fairly and with respect, involves students in the learning, varies the teaching activities, offers sufficient time for students to work through these activities, paces material so that it can be learned, considers students' prior knowledge, and places the content of the course within a practical context.

Summary

During the months of April, May, and June 1999, over 2,000 questionnaires were completed by students in DARE classes, recent graduates of DARE programs, parents of DARE students, and teachers in DARE classrooms. In this chapter, the analyses of the closed-response items in these questionnaires were reported and the written responses to the open-ended questions were summarized.

The analyses implied a general overall acceptance of DARE as a drug-resistance and violence-avoidance program. All subject groups acknowledged that such a program was necessary, and there was strong support for DARE's continuance in West Vancouver schools.

Both parents and teachers suggested that the two DARE programs taught in West Vancouver were age- and grade-level appropriate. Both groups requested a greater involvement in these programs and recommended the development of materials that they could use to reinforce DARE lessons.

Acceptance of DARE's objectives, content, teaching strategies, and materials varied by group. Many students perceived that DARE had been successful in achieving a number of objectives and that they had been prepared with strategies for resisting drugs and violence, particularly in the elementary grades. Some students actually reported that they had used such strategies when they had encountered situations where drugs or alcohol had been available or violence had been a possibility. Nevertheless, not all objectives were strongly supported by parents or teachers.

Most students accepted DARE's content as being relevant and current. Students appeared to prefer those activities that most directly involved them in the lessons. There was some concern expressed by teachers about the need to revise some of the DARE materials.

There was sufficient evidence to conclude that DARE had a positive effect on students' attitudes toward the police, and in particular toward members of the West Vancouver Police Department. Moreover, a police officer, either alone or teamed with a teacher, school nurse, counselor, or other school faculty member, was the overwhelming choice of most groups as the person most suitable for teaching DARE.

In the following chapter, the findings are discussed and placed within the context of the research literature.

CHAPTER 5

SUMMARY, DISCUSSION, AND CONCLUSION

The Study

The purpose of this study was to examine attitudes toward the Drug Abuse Resistance Education program (DARE) of students, teachers, and parents in West Vancouver, British Columbia, Canada. The study was authorized by the West Vancouver Police Department and School District #45 (West Vancouver).

DARE, a drug-education and violence-avoidance curriculum that is widely used in the United States, is presently offered by police departments in a number of Canadian jurisdictions. The three programs that comprise DARE are taught by specially trained uniformed police officers using lessons and materials prescribed by DARE America. In addition to the claims in the literature that DARE changes children's attitudes and behaviors toward illegal drug use (including alcohol) and provides them with strategies for managing potential violence, the DARE literature contains references to increased self-esteem, and the development of assertiveness, decision-making and interpersonal skills. However, claims such as these are difficult to authenticate, and the review of the research on DARE outcomes conducted for this study revealed that the findings of this research were diverse and inconsistent. The ambiguous nature of these findings implied that decisions about local DARE programs should be made on the basis of locally collected data.

The initial stage of this study consisted in developing a list of research questions that could be used to assess attitudes toward DARE. These questions defined the subject groups, and then were used as the basis for constructing the items in the questionnaires. During the second stage of the study, the questionnaires, consisting of both closed and open-ended response items, were administered to all students in the DARE Core and Middle School programs in West Vancouver elementary schools when these programs concluded in late spring, 1999. Questionnaires were also administered to comparison groups consisting of all 6th-grade students and a number of available 8th-grade students during the same period. Additionally, teachers whose students had received DARE instruction during the year were given questionnaires, and *Core* and *Middle School* students were given questionnaires for their parents to complete at home. Over 3,000 questionnaires were distributed, and of these, 2,227 questionnaires were returned to the researcher. During the final stage of this study, the questionnaires were coded, recorded and analyzed, and this report was prepared.

Summary of Findings

The study was designed to collect data on a number of questions intended to reveal the opinions, preferences, and perceptions of students, teachers, and parents toward the DARE program. Findings based upon the analysis of these data are here summarized.

At some point in this report, readers may have been inclined to ask what the numbers reported here meant in terms of attitudes toward the DARE program, and how they should now be used to make informed decisions about it. These readers, for example, may have had a question about the degree of teachers' support that would have been required in order to have declared that teachers as a group had endorsed DARE, or they may have wanted parameters for judging whether a DARE objective had been achieved[1]. Questions such as these are concerned with the educational significance of the findings, and they involve making decisions about the importance of the findings for educational practice. Statistical tests can be used for comparisons—as they were in the preceding chapter—but once comparisons have been made and differences identified, the question of educational significance remains. To this researcher's knowledge, however, no commonly accepted conventions exist for establishing educational significance, which is, by and large, a subjective decision, and one that is

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[1] Percentages are frequently used in educational documents to report responses to attitude items. The reader may find it useful to consider how these percentages have been characterized elsewhere. Percentages ranging from 79 to 93 that reported parents' satisfaction with various aspects of their children's education in Edmonton, Alberta (Edmonton Public Schools, 1997), were described as a *large majority*. The following terms were used to define the percentages of responses of SSA scholarship recipients to questions pertaining to their opinions of the SSA program: *very high level of overall satisfaction* (89%-97%); *high level of satisfaction* (82%); *smaller majority* (64%); *most scholarship winners* (55%); *many scholarship winners* (18%) (Evaluation of the SSA, 1999). Percentages of responses of British Columbia students to items which were purported to assess attitudes toward mathematics and science were described with these terms: *vast majority of students* (76%-95%); *majority* (75%) (1995 British Columbia Assessment, 1998).

In order to assure a degree of consistency in the summaries, the following terms, or their synonyms, were used to describe percentages: *all, exceptionally high, remarkably high,* (95%-100%); *most, very high, considerably high, substantially high, very strong* (90%-94%), *high, strong, considerable* (80%-89); *very large majority, particularly large majority*, decidedly *large majority* (75%-79%); *large majority, large number, general* (70%-74%); *clear majority* (60%-69%); *simple majority, majority* (50%-59%), *few* (below 50%).

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likely to be influenced by a person's commitment to a particular philosophical or educational position. For this reason, few recommendations are suggested in the summaries. For the most part, the reader is left with the task of deciding the significance of the findings and with the task of making recommendations based upon a personal interpretation of them.

The following summaries, which are based on responses both to the closed and open-ended items in the questionnaires, describe the opinions, preferences, and perceptions of students, teachers, and parents concerning 1. the need for a program such as DARE in West Vancouver schools, 2. various aspects of the DARE curriculum, 3. the attitudes toward DARE as a drug-education, violence-avoidance program, and 4. attitudes toward the police.

1. Perceptions of the Need for Drug-resistance, Violence-avoidance Education in West Vancouver

Unless those most directly involved in DARE perceived a need for such a program, it would be difficult to maintain DARE, or a similar program, in West Vancouver schools. Therefore, assessing the demand for drug-resistance, violence-avoidance education in West Vancouver was an important procedure in this study.

Students, teachers and parents in this survey agreed that a need existed for drug-education and violence-avoidance programs in West Vancouver schools. The perception of the need for such programs was very strong among the teachers and the parents, but less so among the students, especially at the local school level. A greater percentage of *Core* students than *Middle School* students endorsed a drug-resistance, violence-avoidance program in their own particular schools; but in somewhat equal proportions, the students in these groups were solidly in favor of such a program in other West Vancouver schools.

Perhaps many teachers and parents based their opinions on the need for a program such as DARE on their perceptions of the ages and grades at which children might encounter drugs and violence within the community. Indeed, responses on teachers' questionnaires revealed a mean age of 11 years--when most children are enrolled in Grade 6--for possible drug encounters, while the mean age calculated from the parents' questionnaires was 11.5 years. Mean ages at which teachers and parents thought children may encounter violence was even lower, at 7 and 9 years, respectively. What must distress many parents is their belief that drug and violence encounters could occur as early as age 5. In fact, 5 years was the most frequently mentioned age by teachers when asked when they thought their students may encounter some form of violence.

It is likely because teachers believed that encounters with drugs and violence were possible at such an early age that almost a quarter of them recommended that a program such as DARE be taught in the primary grades. All teachers agreed that by the end of Grade 7, students should have completed such a program. The majority of parents offered support for this recommendation when they responded that they thought the DARE program their children had received during the year was age- and grade-appropriate.

Graduate students offered strong support for a drug-education and violence-avoidance program being taught in Grade 5. Although there was moderate agreement among *DARE* subjects that 5th-grade students were mature enough for such a program, the degree of agreement declined when students responded to an item that had them consider whether they would recommend that "DARE or programs like DARE" be taught below Grade 5.

Summary

All subject groups acknowledged the need for a drug-resistance, violence-avoidance program in West Vancouver. Some parents and teachers suggested that such a program should be offered in the primary grades, but the majority of respondents, including the *DARE* and non-DARE students, indicated support for a program taught at the intermediate level, perhaps Grade 5.

2. Opinions, Preferences, and Perceptions about Aspects of the DARE Program

Attitudes toward DARE were assessed by having subjects respond to a wide variety of questions pertaining to specific aspects of the program. In this section, responses to questions pertaining to the objectives, the content, the teaching strategies, and the materials of DARE are considered. Other questions concern the roles of parents and teachers in the DARE program, and who should teach DARE.

DARE Objectives

Agreement with DARE's objectives was uniformly very strong among DARE teachers. Parents' acknowledgment that DARE's objectives were appropriate for a drug-resistance, violence-avoidance program was almost equally as strong, except for objectives that had to do with self-esteem, assertiveness, decision-making, and acceptance of human diversity, where (especially for *Middle School* parents) the degree of support, though still strong, dropped slightly.

DARE Content

As a group, a large majority of teachers agreed that the content (that is, the information the children were given and the strategies for avoiding or managing drug/violence situations they were taught) of the DARE program was suitable for their students. Support was greatest among Core teachers, whose responses indicated a high level of satisfaction with the content of the DARE program. The opinion that DARE was suitable for their students was expressed by a clear majority of the Middle School teachers..

All student groups were asked to comment on the validity of the information taught in the DARE program. Overall opinion of this information was very positive, with support varying from high among members of the *Core* group to a majority among the *Programs Graduate* students.

While the content of the DARE program appeared to be widely accepted, both teachers and parents suggested additional topics that should be included. Among these topics were methods for managing and controlling bullying, the legal implications of illegal drug use, and more "realistic" ways to say "no" to drugs. Many parents recommended that more attention be given to violence-avoidance strategies. Some parents and teachers stated that the content in the Middle School program was too similar to that in the Core program.

DARE Teaching Strategies

"Teaching strategies" refers to the teaching approaches (such as cooperative learning) that are used to teach the information and drug-resistance and violence-avoidance strategies that are the objectives of the DARE program. All three subject groups—parents, teachers, and students—responded to questions pertaining to this topic.

A very large majority of parents supported the use of the teaching strategies employed in DARE. However, overall support from teachers was moderate, and varied from a clear majority of Core teachers to slightly less than a majority of Middle School teachers. Teachers' support for the ways DARE was taught was likely related to their recommendation that the amount of direct teaching be reduced and more activities that involve students be introduced. It can probably be inferred that students would endorse this recommendation since the activities they enjoyed the most, such as role-playing, acting in skits, playing games, and working in groups, required them to actively participate in the lessons.

DARE Materials

Videos, games, and the DARE book were among the teaching materials authorized by DARE America for use in DARE classrooms. Overall, parents expressed a high level of satisfaction with these materials, with only a slight difference that favored the Core parents over the Middle School parents observed. However, this level of satisfaction was not indicated in the teachers' responses. Teachers were asked to comment on the age-appropriateness of the materials and their suitability for achieving the objectives of the DARE program. Their overall response implied that a large majority of teachers accepted the DARE materials as being age-appropriate, but this majority was primarily due to a very high acceptance by Core teachers, with only a moderate acceptance by the Middle School teachers. Comments by teachers revealed that a number believed that the materials were out-dated and in need of revision. A number of Middle School teachers suggested that the materials used with their students were too immature. Agreement with the statement that the materials were suitable for achieving DARE's objectives was only moderate, with no discernible difference between the agreement rates of Core and Middle School teachers.

Students' acceptance of DARE materials was inferred from their rankings of activities and in their selections of what they liked best about DARE. Games (e.g., DARE bingo, DARE Jeopardy) were ranked very high, both as activities the students enjoyed and as aspects of DARE they liked the best. The DARE videos also ranked high in both areas. The DARE book, from which the students were required to complete assignments, was less well-received, perhaps because homework was most frequently identified by students as the aspect of DARE they liked the least.

Presentation of Lessons

Whether police officers, with minimum training by present-day teacher-education standards, can do a satisfactory job in the classroom is a question germane to this study. However, teachers' responses to questions pertaining to clarity of lesson objectives, officers' rapport with students, and presentation of lessons indicated that police officers did just that. Teachers indicated a very high level of satisfaction with the rapport the officers established with their students, and an almost equally as high level of satisfaction with their students' understanding of lesson objectives. A moderate majority of Middle School teachers and a smaller but still a majority of Core teachers agreed that lessons had been presented in an "effective manner."

How well lessons had been presented could also be inferred from the exceptionally large majority of both *Core* and *Middle School* students who stated that they had understood "most of the DARE lessons."

The Role of Classroom Teachers

This study revealed that, while teachers strongly supported the continuance of DARE in West Vancouver schools (as will be noted elsewhere), very few were actively involved in the program. In fact, many teachers simply left the classroom when the DARE lesson began. Those who remained either assisted with discipline or quietly worked at their desks. The need for a more clearly defined role that would engage them in the lessons was suggested by a number of teachers. A number of teachers also requested materials that could be used in follow-up lessons.

The Role of DARE Parents

Although as a group, parents strongly supported DARE, and their interest in DARE was very high, many of them felt uninformed and uninvolved in the program. Beyond what their children discussed at home and the DARE Graduation, few parents had had any contact with the program. Many expressed a desire to attend an "orientation to DARE" meeting early in the year. Many parents also asked for suggestions about ways they could reinforce what their children had learned in DARE.

The DARE Instructor

A police officer, as instructor, either alone or teamed with another person such as the classroom teacher or school counselor, was the clear choice of each subject group for both the elementary and the high school DARE programs.

Support for a police officer unassisted by school personnel was highest among classroom teachers, and no combination of instructors they mentioned excluded a police officer. Support for a police officer as the sole DARE instructor was less strong among the parents, but almost all combinations they suggested included a uniformed officer. Parental support for a police officer was expressed in the many comments that mentioned individual DARE instructors by name and referred to the positive influences these officers had had on their children.

In like manner, a very large majority of *DARE* students recommended a police officer as being the most suitable person to teach the DARE program. A large majority of *Core Graduate* students also identified the police officer as the "right person" to teach DARE. However, less than half the *Programs Graduate* students supported this opinion, and a clear majority of support for a police officer was obtained only when suggestions that the police officer be teamed with another person were included.

Summary

Agreement with DARE's objectives, content, teaching strategies, and materials was common to all subject groups, although it varied in depth depending on the topic or group being considered. It seems reasonable to suggest, therefore, that support for DARE as a program suitable for elementary school students was evident in the responses of the students, teachers, and parents most closely involved in the program. Howbeit, attention should be given to questions concerning the utilization of teaching strategies that require more student participation and the use of materials considered by at least a few teachers to be out-dated and immature. Additionally, the comment of some parents and teachers that the Middle School program too closely replicates the Core program needs to be examined.

Parents expressed a desire to be included in the DARE program, and teachers requested that their role in DARE be more clearly defined. As well, both groups would like to receive instructions detailing what they could do to support or enhance the lessons taught in DARE.

3. Attitudes toward the Efficacy of DARE as a Drug-resistance and Violence-avoidance Program

In this section, the discussion centers on the question of whether DARE is considered to be an effective drug-resistance, violence-avoidance program in West Vancouver schools. Without doubt, this is the central and most important question in Part 1, but it is also the most difficult to answer inasmuch as a judgment here must be based on subjects' responses to a variety of items in the questionnaires from which attitude might be inferred. Since at present no standardized test exists for measuring attitude toward DARE's effectiveness, it is necessary to propose criteria for judging this variable and then to leave it up to the reader to assess the reasonableness of a decision based on them.

As seen in the previous section, there appears to be general agreement that DARE is a well-planned program, and that it was competently presented by members of the West Vancouver Police Department. Nevertheless, although these attributes are prerequisites for program acceptance, they were not sufficient measures for judging its acceptance as a drug-resistance, violence-avoidance program. Additional evidence was required.

The researcher proposed that answers to the following questions would provide a basis for making a sound, albeit subjective, judgment about attitudes toward the efficacy of the DARE program in West Vancouver classrooms:

- Were the objectives of DARE perceived to have been achieved?
- Were students interested in DARE?
- What did students, teachers, and parents think was DARE's reputation as a drug-resistance, violence-avoidance program?
- Did those most closely associated with the program think it should be continued in West Vancouver schools?
- How did teachers evaluate the program?

- Did students actually use what they had learned in DARE to avoid drugs and violence?

Prior to considering these questions, it is of interest to note a pattern of responses that occurred frequently throughout the analyses, and which was referred to briefly in the preceding chapter. That is, the strongest support for DARE, or some aspect of DARE, tended to be expressed by the youngest group, the *Core* students. *Core Graduate* students tended to express the next highest level of support, to be followed in turn by the *Middle School* and the *Programs Graduate* students. In almost every case where group opinions were compared, the most positive comments were collected from the 5/6th-grade *Core* students and the least positive were collected from the 8th-grade *Programs Graduate* students; while the 6th-grade *Core Graduate* students were more positive than the 7th-grade *Middle School* students. The reason for this pattern is not clear. Perhaps maturation played a part in the way students responded to the didactic approach that characterized some DARE lessons, or perhaps as students progressed from Grade 5 to Grade 8 they encountered increased pressure from peers to conform in ways that ran counter to, and competed with, what was taught in DARE.

A question that is relevant to this study but that cannot be answered from the data collected by the questionnaires--since all students had had either one or both DARE programs and a pretest-posttest design was not a feature of this study--is how students beyond the Core program might have responded to many items in the questionnaires had they not had DARE.

Were the Objectives of DARE Perceived to Have Been Achieved?

Student opinions of DARE's effectiveness as a drug-resistance, violence-avoidance program were assessed through their responses to a number of items in the questionnaires. To questions of whether DARE prepared students to resist drugs, their responses varied, but only in degree of agreement. Exceptionally high numbers of *Core* and *Core Graduate* students indicated that they thought DARE prepared young children in elementary school to resist drugs. Agreement with this belief was less strong among *Middle School* and *Programs Graduate* students, but it was still supported by a very large majority of students in each group. However, all groups were much less certain of DARE's effectiveness when students moved on to high school. Still, a clear majority of *DARE* students thought that what was taught in DARE would assist students to resist drugs in high school. On a more personal level, a large majority of *Core Graduate* students and about half of the *Programs Graduate* students reported that they thought that what they had learned in DARE would likely keep them off drugs in high school. When asked a similar question concerning violence, a clear majority of *Graduate* students acknowledged a belief that DARE strategies would be useful for managing or avoiding potentially dangerous situations.

Students' responses to a number of statements in the *DARE Attitude Scale* that pertained to claims made by DARE supporters provided evidence of their belief in DARE's effectiveness as a drug-resistance, violence-avoidance program. Acceptance of these claims was strongest among the

Core students. And, while support for these statements was less obvious in the responses of the other student groups, every claim was supported by at least a clear majority of the students in each group.

In a somewhat related question, students reported their perceptions of whether they had actually acquired the attitudes and skills which DARE is purported to teach. Here the pattern of group responses referred to above was quite apparent. That is, perceived achievement of an individual attitude or skill was always greater among the *Core* students, and, in almost every case, declined in order for *Core Graduate, Middle School*, and *Programs Graduate* groups. On the average, a very large majority of *Core* students, clear majorities of *Core Graduate* and *Middle School* students, and a simple majority of the *Programs Graduate* students acknowledged possession of the attitudes/skills listed in the question.

Strong agreement among all groups was indicated only for the item that referred to increased student awareness of the dangers of drug use. Almost equally as strong, however, was the perception among students that they had been taught strategies that would assist them in avoiding illegal drugs. Furthermore, varying from a strong majority of *Core* students to a clear majority of *Program Graduate* students, there was general agreement that DARE had helped them to understand peer pressure and had taught them strategies for resisting pressures from peers to use drugs. A similar pattern of support was noted for the opinion that students had been taught to consider the consequences of an action before acting. A clear majority in all groups also stated that they now understood how media influences might affect their choice of behaviors. Objectives dealing with gang membership and violence-avoidance were perceived to have been achieved by a large number of *Core* students and a clear majority of the members of the remaining groups save for the *Programs Graduate* group. But even within the latter group, many students believed that because of DARE they were less likely to join gangs, could express their anger in non-violent ways, and could avoid violence by using conflict management skills.

The findings concerning self-esteem, assertiveness, and stress recognition were disappointing. While a clear majority of *Core* students acknowledged that DARE had helped them in these areas--with the exception of a majority of *Core Graduates* who believed that they had been helped to recognize what stresses them--less than half the students in each of the remaining groups appeared to have experienced increases in either self-esteem, assertiveness, or the ability to recognize stress factors.

Student Interest

Teachers' perceptions of their students' interest in DARE lessons varied: while a large majority of Middle School teachers believed that "most" of their students' had enjoyed DARE, all *Core* program teachers made the same assessment. Responses from *DARE* students, on the other hand, revealed that teachers' perceptions of student interest were too generous. The considerable number of *Core* students who acknowledged that they had found the lessons to be very interesting most closely resembled their teachers' estimations. But a significant discrepancy was found between the estimation of student interest by Middle School teachers and the selfreported interest of their students, fewer than half of whom stated that they had enjoyed the lessons.

Interest in DARE was also implied, first, from students' responses to questions that asked whether they had discussed DARE with parents and friends and, second, from parents' responses to items that asked whether their children had talked with them at home about DARE, and, if they had, who had usually initiated the discussions. A very large majority of *Core* students and their parents reported discussions of DARE in the home. Similar discussions were reported by a large majority of the parents of *Middle School* students but by much fewer of their children. A clear majority of *Core* students but slightly less than a majority of *Middle School* students reported that they had discussed DARE with their friends. Since there are no standards for determining degree of interest from the preceding information, it is difficult to argue the significance of these findings. However, in a previous study conducted by the researcher in which student-parent discussions were also seen as indicators of student interest, the teachers involved suggested that they would be pleased if only 40% (well less than a majority) of their students spoke about a particular course of studies with their parents (Curtis, 1978).

Additional evidence of students' interest in DARE was found in their comments pertaining to changes they would make in the DARE program. It was significant that the recommendation that DARE be made into a longer program exceeded all other recommendations.

Perceived Opinions of Others Toward DARE

In this study, students', teachers', and parents' perceptions of the opinions of others concerning DARE were considered to be indications of attitude toward DARE's effectiveness as a drug-resistance, violence-avoidance program.

DARE students expressed very strong agreement that their parents thought the DARE program was "worthwhile," and strong agreement that their teachers held a similar opinion. It was interesting to note, nevertheless, that although most *Middle School* students believed their parents thought the program was beneficial, only a moderate majority of them suggested that their parents were interested in what was taught in DARE.

As a group, *DARE* students were less positive in their opinions of whether they thought their friends believed DARE to be an effective program, and the numbers of students who perceived their friends' acceptance of DARE ranged from considerable for the *Core* students to a simple majority for the *Middle School* students. A majority of *Graduate* students also thought that their friends believed that DARE was a "good" program for teaching students to avoid drugs and violence, but among the *Programs Graduate* students this position was supported by less than a majority.

A very large majority of the teachers in DARE classrooms suggested that "most" teachers supported DARE, but they expressed a great deal of uncertainty concerning parents' support of the program. Parents of *DARE* students, on the other hand, expressed very strong agreement with the statement that DARE was supported by "most" parents.

Teacher Evaluations of DARE

Teachers' opinions that DARE was widely supported in the schools was most likely related to their evaluation of DARE as a drug-resistance, violence-avoidance program. Support for DARE as a "good" drug education program was high. Support for DARE as an "adequate" program was provided by almost all the teachers. DARE fared less well as a violence-avoidance program, as only a clear majority of the teachers rated it as "good." When the standard was dropped to "adequate," however, the number of teachers supporting DARE as a violence-avoidance program increased substantially.

Should DARE Be Continued?

All groups agreed that DARE should continue to be taught in West Vancouver, although the degree of agreement varied somewhat among the student groups. Very strong support for DARE's continuance came from parents, DARE classroom teachers, and surprisingly, *Graduate* students. Here, student responses differed noticeably from the pattern of responses that occurred generally throughout the analysis. Whereas a considerable number of *Graduate students* recommended that DARE be taught in their schools the following year, only a large majority of *DARE* students agreed.

Do Students Use DARE Strategies?

A considerable number of students graduated from DARE believing that because of what they had learned in DARE they were not likely to engage in drugs or violence. The final question in this section is concerned with whether students had actually used what they had learned in DARE to resist drugs and to manage or avoid potentially violent situations.

Almost half the *Graduate* students had encountered situations where drugs or alcohol had been available and a slightly larger number of them had been in situations where they had presumed the likelihood of violence to be real. Of these students, the majority of *Core Graduates* and a few of the *Programs Graduates* had used what they had learned in DARE to resist drugs or alcohol. In a similar manner, the majority of *Core Graduates* and a few *Programs Graduates* had managed to avoid violence by resorting to strategies learned in DARE. A few students had not used DARE strategies because they had believed that they would not be effective; most students who had not used what they had been taught in DARE either were determined to take drugs regardless of what they had been taught or they simply enjoyed violence.

Summary

There appears to be a reasonable amount of evidence to conclude that overall attitudes toward DARE implied its acceptance as a viable drug-resistance, violence-avoidance program. DARE's reputation among teachers and parents appeared to be firmly established, and all subject groups agreed that it should continue to be taught in West Vancouver schools. Furthermore, according to many students, DARE was very successful in teaching a number of the attitudes and skills that they presumed would assist them to resist drugs and avoid violence, and a number of students had actually used them for these purposes.

4. Attitudes toward the Police

Perhaps one of the most evident findings of this study concerns the general attitude of parents, teachers, and students toward the members of the West Vancouver Police Department. As mentioned earlier, parents frequently referred to DARE instructors by name, and police officers were overwhelmingly selected as the most suitable instructors for DARE. There was strong agreement among the parents that their children's attitudes toward the police had been positively affected by DARE, and even stronger agreement that their children would seek out a police officer in time of need. Support for the former opinion from teachers was provided by a considerable number of Core teachers and a clear majority of Middle School teachers.

Among the students, there was moderate support for the opinion that DARE increases respect for the police and that most students think of the DARE officer as their friend. A very large majority, albeit, suggested that DARE students learn to trust the DARE officer, and most students agreed with the statement that police officers are trying to make West Vancouver a "better and safer" community.

Discussion

Support for most of the findings in this study can be found in the research literature on DARE, and few findings were unanticipated. The purpose of this discussion, therefore, is to place these findings within the context of this research literature with the intention of arriving at a clearer understanding of the DARE program as it was taught in West Vancouver.

This approach to helping readers understand the findings of a particular study by comparing them with the findings of prior studies is routinely reported in the literature. Still, after carefully considering previous studies, the researcher decided that to do so here required the following caveat: many studies were conducted prior to the 1994 revision and there were significant differences between the DARE programs in these and in the present study; previous studies were conducted in communities with very little similarity to West Vancouver; study attributes (such as sample size and student characteristics, among others) in previous studies were not comparable to those in the present study; instrumentation among DARE studies was varied; and other factors besides the DARE program might have influenced study outcomes.

Studies of DARE have shown consistently that parents and teachers strongly support the program (Burfeind & Bowker, 1996; Donnermeyer, Phillps, & Davis, no date; Donnermeyer & Wurschmidt, 1997; Minnesota Institute of Public Health, 1997; Paludi, 1997; Walker, 1990), and such was one of the findings of this study. Without doubt, parents and teachers in the present study expressed strong support for DARE, and both groups recommended its continuance in West Vancouver schools. Furthermore, as also revealed in the present study, these groups were solidly in favor of DARE being taught by uniformed police officers who, they maintained, are very responsible instructors, and who do a credible teaching job in the DARE classroom--opinions that occurred frequently in the literature (see, e.g., Paludi, 1997; Silva, 1995; Walker, 1990).

Agreement with the conclusion of this study that all subject groups, at least to some degree, believed that DARE effectively teaches students about the dangers of drug use and that, in addition, it teaches them strategies for avoiding illegal drugs is found in a number of studies (Belsito, 1996; Fife, 1994; Van Giffen & Lois, 1997; Walker, 1990). Moreover, the percentages of students in the present study who believed that because of DARE they were less likely to use drugs compared very favorably with the percentages of students who acknowledged the same belief (Belsito, 1996). Students in the present study were equally as enthusiastic as students elsewhere that DARE continue to be taught in their schools (Paludi, 1997). It is interesting to note that if the degree of student interest in DARE that was demonstrated in the present study could be generalized to students throughout British Columbia, it would be proportionate to the degrees of student interest shown in provincial assessments for mathematics and science (The 1995 British Columbia Assessment, 1998).

But DARE does not do all things equally as well as it increases students' awareness of the dangers of drug abuse. As described earlier, a basic tenet of DARE's philosophy is that knowledge alone is not sufficient for resisting drugs. Without high self-esteem and the inclination toward assertiveness, the student is assumed to be ill-prepared to face peer and community pressures to use drugs[1]. Nevertheless, the conclusion in this study that DARE is less successful at increasing self-esteem and assertiveness than is it in achieving other objectives finds wide support in the research literature (e.g., Besito, 1996; DeJong, 1987; Ennett, Rosenbaum, Flewelling, et. al., 1994; Harmon, 1993; Pecchia, 1991; Ringwalt, Ennett, & Holt, 1991). What DARE attempts to do with self-esteem and assertiveness in a very few lessons is commendable, but self-esteem--that is the value people place on themselves and their behavior (McCandless & Evans, 1973)--is a rather stable attribute that is said to be related to one's cognitive capacities, social interactions, ethnicity, and gender characteristics, among others (Alleman & Rosaen, 1991). And, while research has shown that self-esteem can be enhanced through educational programs (see, for example, Curtis & Shaver, 1981), it is, most often, a difficult and lengthy task. Furthermore, it seems reasonable to argue that a relationship exists between self-esteem and assertiveness, and that increasing assertiveness in students may be equally as difficult as it is to increase self-esteem. This is not to suggest that these should not be desired outcomes for the DARE program; rather, it is to offer the opinion of the researcher that these two attributes are not likely to develop to any degree as a direct result of DARE instruction, an opinion also expressed by Kochis (1995).

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[1] No studies could be located in the literature that showed a relationship between self-esteem or assertiveness and the use of DARE strategies. Phi coefficients calculated from data collected in the present study from students who had had opportunities to use DARE strategies and who claimed self-esteem or assertiveness were the following: avoidance of drugs and self-esteem .21; avoidance of drugs and assertiveness .18; avoidance of violence and self-esteem .08; avoidance of violence and assertiveness .09.

The pattern that emerged early in the analysis and that seemed to be sustained throughout the study, and which raised a serious question about the efficacy of DARE with older students, was noted in prior research. While a number of longitudinal studies revealed that the residual effects of DARE instruction seemed to decrease over time (e.g., Dukes, Stein, & Ullman, 1997; Rosenbaum & Hanson, 1997), the finding in this study that support for DARE appeared to decline as students moved from Grade 5 (mostly 12-year-olds) through Grades 8 and 9 (mostly 15-and 16-year-olds) cannot adequately be explained by prior studies.

Ennett, Tobler, Ringwalt, and Flewelling (1994) considered this problem in their meta-analysis of DARE studies and suggested that "greater effectiveness is possible with early adolescents", and a majority of teachers in the Minnesota Institute of Public Health study (1997) agreed with the statement that as children get older "other influences in their lives overcome the effects of DARE." Although Alleman and Rosaen (1991) were not describing DARE in their discussion of how self-esteem develops, their comment that adolescence is a transitional period in which students experience a "shift from a strong identification with teacher to identification with peers" may have a bearing on the question. They suggested that during this period, many students actually come "to resent the teacher and the accompanying designated authority." Dukes, Stein, and Ullman (1997) characterized this transitional period as one of "intense peer group pressure, anxiety, and a short-term view of the future." If the preceding comments have any validity, they may explain, at least partially, the pattern of declining support observed in the present study. That is, this pattern may reflect a psychological attribute of students during a particular period of adolescence, and that any drug-resistance, violence-avoidance program--especially a program that relies as much on the authority of the presenter as does DARE--will experience some resistance from students. Nevertheless, it should not be concluded that DARE was not effective with students beyond the CORE Program. A perusal of Chapter 4 will remind the reader that for many *Middle School* students DARE was a very effective program, and also that the responses of a large number of the 8th-grade students were interpreted to imply a favorable attitude toward DARE. Moreover, the reader is reminded of the strength of support from all student groups for the continuance of DARE in West Vancouver schools. Perhaps the opinion expressed by Dukes, Ullman, and Stein (1995) following their study that "At least during the academic year in which DARE was offered, some adverse maturation effects were halted...." has some relevance for this present study.

There is evidence in the literature that DARE may reduce drug use and violence, at least for a short period of time (Clayton, Cattarello, & Johnstone, 1996; Dejong, 1987; McNeal & Hansen, 1995; Rosenbaum, 1995; Rosembaum & Hanson, 1997; Sigler & Talley, 1995). However, DARE does not--nor is it a reasonable expectation that DARE is ever likely to--eliminate them. In most studies of drug education programs, including DARE, some drug use continued after the programs were completed (see, e.g., Becker, Agopian, & Yeh, 1992; Ennett, Tobler, Ringwalt, et al., 1994; Pecchia, 1991; Tobler, 1986; Walker, 1990; Wysong, Aniskiewicz, & Wright, 1994). And such was the case in the present study, although the degree and kind of drug use was not determined.

Van Giffin and Lois' study (1997) revealed that DARE has the least effect on students who have already made a decision to use drugs or to engage in violence. This seemed to be the case in the present study, also.

A large number of students acknowledged that they had used what they had learned in DARE to resist drugs and avoid violence, but a substantial number said that they had not done so because they had wanted to take drugs or drink alcohol or they simply enjoyed fighting. Many students justified their decision not to use DARE strategies with the explanation that they had believed that these strategies would not have worked. Almost a quarter of the students in Fife's (1994) study acknowledged the same belief. It would appear, then, that DARE is most effective with those students who have not yet determined to use drugs or commit violence, and who can be convinced that DARE strategies can be used effectively.

Interestingly, most studies of DARE's effectiveness have focused on drug-related attitudes and behaviors and seem to have ignored the violence-avoidance aspect of the program. Rosenbaum's study (1995) suggested that negative attitudes toward gang membership and violence were an outcome of DARE instruction, and Belsito (1996) reported that a majority of students in her study believed that DARE had equipped them to avoid gangs. A later report by Rosenbaum and Hanson (1997) revealed that the students in their study reported less concern with gangs and violence following DARE, but the researchers concluded that this finding was inconclusive because "other factors than DARE were involved." Nevertheless, the findings of the present study suggest that a large number of students perceived themselves to be adequately prepared to avoid gang membership and to react to potentially violent situations in non-violent ways.

The finding in the present study that many teachers and parents felt somewhat excluded from DARE and wanted a more significant role in the program replicated similar findings in a number of earlier studies. For example, less than a quarter of the teachers in Belasik and Belsito's study (1993) were involved in working with their DARE instructors. As well, in earlier studies in Victoria, British Columbia, by Walker, the percentages of teachers involved in DARE varied from 30% (1989) to 53% (1990). Walker's studies revealed that many teachers (58% in the 1989 study and 73% in the 1990 study) wanted to participate more actively in the DARE program.

In the two studies conducted in Fort Lauderdale, the percentages of parents who had actually met a DARE instructor varied from 20% (Belasik & Belsito, 1993) to 28% (Belsito, 1996). The Minnesota Institute of Public Health (1997) reported that most parents' contact with DARE was limited to attendance at the graduation ceremonies, and it strongly recommended that parental involvement in DARE should be "expanded." Recommendations resulting from studies by Aniskiewicz and Wysong (1990), Becker, Agopian, and Yeh (1992), and Burfeind and Bowker (1996) agreed that parents should be actively involved in DARE. Accordingly, it was reasonable to assume that a similar recommendation would result from the present study.

The positive effect DARE seems to have on students' attitudes toward the police has been widely reported in the literature (see, e.g., Faine & Bohlander, 1988; Fife, 1994; Kethineni, Leamy, & Guyon, 1994; Silva, 1995; Van Giffin & Lois, 1997). Additional confirmation for this opinion was provided by the present study. In this study, parents and teachers' support for the belief that DARE modified children's attitudes toward the police in a very positive manner was comparable to, or exceeded, the degree of support expressed in other studies (e.g., Paludi, 1997). The respect shown by students for DARE instructors and other members of the West Vancouver Police Department was at least the equal to that revealed in other studies (e.g., Donnermeyer & Phillips, no date).

Conclusion

Attitude toward DARE was inferred from the responses to questionnaire items that were purported to assess subjects' opinions, preferences, and perceptions of DARE. Based upon the generally very affirmative nature of these responses, it seemed reasonable to conclude that support for DARE was strong in West Vancouver and that attitudes toward DARE held by students, teachers, and parents were positive. All subject groups endorsed the recommendation that DARE continue to be offered in West Vancouver schools.

This study revealed that there was a common perception among subject groups that DARE was most effective in informing students of the dangers of drug and alcohol use and in teaching them ways to respond when they are faced with situations involving either drug use or violence. However, it also raised a number of questions--such as how to effectively engage parents and teachers in the program, how to manage the declining interest in DARE as students grow older, and how to more actively involve students in the learning activities, among others--that require the attention of both DARE instructors and classroom teachers. But all in all, in a short period of time, and with programs involving just a few hours each, DARE has managed to gain a solid reputation in West Vancouver--without compromising its message. Taught by dedicated instructors who are seen by many parents as role-models for their children and by many students as friends, DARE may prove to be not only an effective drug-abuse, violence-prevention program, but an excellent public relations vehicle for the West Vancouver Police Department, as well.

That said, the reader is reminded that the focus of Part 1 was attitude toward DARE, and the opinions, preferences, and perceptions of students, teachers, and parents set the parameters for a judgment of program acceptance. Positive attitude toward DARE is a requisite for program efficacy, but it does not of itself assure that the program is successful; that is, although most groups involved with DARE may hold very positive opinions of it, these opinions alone are insufficient for judging whether DARE instruction actually results in the achievement of the knowledge, skills, and behaviors that are its objectives. The conclusion of this study is that there is a very strong general attitude concerning the acceptance of DARE as a drug abuse, violence-avoidance education program. Persuasive as this conclusion may be, additional studies employing experimental or quasi-experimental designs, and including longitudinal studies, would greatly increase the probability of making a valid judgment about the effectiveness of DARE.

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APPENDIX A

CORE: $5^{th}/6^{th}$ GRADE CURRICULUM

1. INTRODUCING DARE
Acquaints students with the role of police and practices for student safety.

2. UNDERSTANDING THE EFFECTS OF MIND-ALTERING DRUGS
Helps students understand harmful effects of drugs.

3. CONSEQUENCES
Helps students understand the negative consequences of drug use and the positive consequences of saying "no" to drugs and avoiding violence.

4. CHANGING BELIEFS ABOUT DRUG USE
Makes students aware of kinds of peer pressure they may face and helps them learn to say no to offers to use drugs.

5. RESISTANCE TECHNIQUES—WAYS TO SAY "NO"
Teaches students ways to say "no" in resisting various types of pressure.

6. BUILDING SELF-ESTEEM
Helps students understands that self-image results from positive and negative feelings and experiences.

7. ASSERTIVENESS: A RESPONSE STYLE
Teaches that assertiveness is a response style that enables a person to state his or her own rights without loss of self-esteem.

8. MANAGING STRESS WITHOUT TAKING DRUGS
Helps students recognize stress and suggests ways to deal with it other than by taking drugs.

9. REDUCING VIOLENCE
Helps students identify nonviolent ways to deal with anger and disappointment.

10. MEDIA INFLUENCES ON DRUG USE AND VIOLENCE
Helps students develop the understanding and skills needed to analyze and resist media presentations about alcohol, including that of drugs and violence.

11. MAKING DECISIONS ABOUT RISKY BEHAVIOR
Helps students apply the decision-making process in evaluating the results of various kinds of risk-taking behavior, including that of drugs and violence.

12. SAYING "YES" TO POSITIVE ALTERNATIVES
Helps students find out about activities that are interesting and in which they can achieve success.

13. POSITIVE ROLE MODELING
Older student leaders and other positive role models that do not use drugs talk to younger students to clarify the misconception that those who use drugs are in the majority.

14. RESISTING GANG AND GROUP VIOLENCE
    Helps students identify situations in which they may be pressured by gangs and evaluate the consequences of the choices available to them.

15. DARE SUMMARY
    Helps students summarize and assess what they learned from the program.

16. TAKING A STAND
    Students take a positive stand to be drug-free and to avoid violence by putting their commitment in writing and reading it aloud.

17. CULMINATION
    Student graduation from the DARE program.

Taken November 8, 1999 from the West Vancouver Police Department's web site, www.wvpolice.org.

APPENDIX B

MIDDLE SCHOOL/JUNIOR HIGH: 7th/8th GRADE CURRICULUM

1. RECONNECT WITH DARE
   Purpose: To recognize students with the goals of the DARE program and to provide reinforcement of skills and understandings to help them in recognizing and resisting pro-social influences that promote drug use and violence.

2. BELIEFS ABOUT DRUGS
   Purpose: To help students clarify their beliefs and opinions concerning the negative risks of illegal drug use.

3. DRUGS, VIOLENCE, AND VICTIMS
   Purpose: To inform students about laws, school behavior codes, regarding possession of substances (alcohol, tobacco, and other dangerous drugs) and acts of violence.

4. RESISTING INFLUENCES ASSERTIVELY
   Purpose: To make students aware of the various pressures that influence or persuade young people to use drugs and to teach them assertiveness as a way for resisting these pressures.

5. FORMING POSITIVE RELATIONSHIPS
   Purpose: To help students recognize the importance of showing respect and appreciation for the diversity of others to develop positive relationships with many different people to fulfill students' needs for affection (being liked), belonging, respect, and feelings of self-worth.

6. RESOLVING CONFLICTS WITHOUT VIOLENCE
   Purpose: To help students to explore ways of dealing with anger and conflicts without resorting to violence.

7. AVOIDING VIOLENT AND GANG-ORIENTED RELATIONSHIPS
   Purpose: To make students aware of the extent of violence impacting people of all ages and all cultural, ethnic, and socio-economic groups in our communities and to help them consider options for avoiding violent relationships.

8. MAKING OUR ENVIRONMENT DRUG-FREE, VIOLENCE-FREE, AND SAFE
   Purpose: Help students explore universally accepted standards of behavior of ideals of what is appropriate, or right, in the way one lives his or her own life and the way in which he or she treats others.

9. DARE SQUARES REVIEW
   The officer will provide an opportunity for students to review and strengthen what they learned from participating in DARE.

10. DARE INFOACTIONS AND CULMINATION
    The officer will help students understand the risks of involvement with drugs and violence related behaviors.

Taken November 8, 1999 from DARE-America's web site, www.dare-america.com.

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APPENDIX C

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TABLE: Topics and Their Respective Questionnaire Items

Topic	*Core*	*Middle School*	*Graduates*	*Teachers*	*Parents*
Need for drug education, in school? in West Van schools?	A1,2	A1,2		A1,2	A1,2
Need for violence-avoidance education, in school? in West Van schools	A6,7	A6,7		A3,4	A3,4
Age/grade drugs/violence are encountered				D2	C2
Grade when Drug/violence avoidance should be taught	A13	A13	A1,2	D2	C1
Acceptance of DARE objectives				C49,50,52	C3
Achievement of DARE objectives	A3, C2; B1,2,5,6,7 8,9,11,12, 13,14,15	A3, C2 B1,2,5,6,7 8,9,11,12, 13,14,15	A3,4,5,9 C1; B1,2,5, 6, 7,8,9,11, 12,13,14, 15	C1-10,	B1,2,
Attitudes toward the police	B3,4,8,11	B3,4,8,11	B3,4,8,11	A8	A9,11
The DARE Program					
1. Who should teach DARE?	A4, C3	A4, C3	A6, C2	D1	C4
2. Is content suitable?	B10	B10	B10	B7	
3. Are teaching strategies /methods appropriate?				B4	B4
4. Are the materials age/ grade appropriate?				B5,6,10	B5
5. Are lessons presented in a competent manner?	C4(5)	C4(5)		B1,2,3	
6. Were students interested in the lessons?	C4(1-3)	C4(1-3)		B8	A5
7. What was the teacher's role in the DARE lessons				D3	
8. Class time and DARE, too little or too much?	C4(4)	C4(4)	A10	A5,7	A10
9. Were parents involved in DARE?					A6,78
10. How do students, teachers, and parents perceive others' opinions of of DARE?	A5,8,9,10	A5,8,9,10	A7	A9, B9	A12
11. How good a program do teachers think DARE is?				D6	
12. Should DARE be continued in West Vancouver schools?	A11	A11	A8	A10	A13
Do students use what they were taught in DARE to avoid drugs and violence?	C4(6,7)	C4(6,7)	A12,13,14, 15		
School as a factor in DARE's effectiveness?	B1-15	B1-15	B1-15		B1-5

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STUDENT QUESTIONNAIRE
DARE SURVEY

The ***Drug Abuse Resistance Education (DARE)*** *program has been taught in West Vancouver schools for several years. The West Vancouver Police Department and the West Vancouver School Board would like to find out what students who go through the DARE program think about it. It is important, then, that you answer the questions in this survey as truthfully as you can. This survey is anonymous. This means that you will not put your name on the questionnaire, and no one will know how you answered the questions.*

I am a boy ____ girl ____. I am in Grade ____(5) ___ (6). I am ____ years old.

Part A *The following questions are answered with either a* ***Yes*** *or a* ***No.***

	Yes	No
1. Do you think that there is a need for a drug abuse education program in your school?	____	____
2. Do you think that there is a need for a drug abuse education program in other schools in West Vancouver?	____	____
3. Do you think that DARE prepares students with the knowledge and skills they need to resist illegal drugs?	____	____
4. Do you think that a uniformed police officer is the right person to teach DARE?	____	____
5. Do you think that your parents are interested in what you learned in DARE?	____	____
6. Do you think there is a need for a program on how to reduce or avoid violence in your school?	____	____
7. Do you think there is a need for a program on how to reduce or avoid violence in other schools in West Vancouver?	____	____
8. Do you think that your teachers think that DARE is worthwhile?	____	____
9. Do you think that your parents think that DARE is worthwhile?	____	____
10. Do you think that most of your friends agree that DARE is a good program for teaching them to avoid drugs and violence?	____	____
11. Do you think that the DARE program should be taught in your school again next year?	____	____
12. Do you think that you are not likely to use drugs because of what you learned in DARE?	____	____

	Yes	No
13. Do you think that DARE or programs like DARE should be taught in grades lower than grade 5?	____	____

***Part B**. Please check whether you **agree** or **disagree** with the following statements. If you agree or disagree strongly, check **Strongly Agree** or **Strongly Disagree**. If you are not sure of your answer, check **Uncertain**.*

1. Students who go through DARE are better able to resist drugs than students who do not.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

2. DARE successfully teaches students how best to avoid violence..

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

3. Students who go through DARE usually have a better opinion of police officers than students who do not.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

4. Most students learn to trust their DARE police officer.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

5. It is easier for students who have had DARE to resist illegal drugs than it is for students who have not had DARE.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

6. Students who have had DARE are more likely to think about the consequences of using drugs than are students who have not had DARE.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

7. DARE helps students to think about suitable ways to avoid violence.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

8. Most West Vancouver police officers are trying to make our community a better and safer place to live.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

9. DARE students are more willing to speak up when they are in an uncomfortable situation than are students who have not had DARE.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

10. Information about drugs that students learn in DARE is true and up-to-date.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

11. Most students who graduate from DARE think of the police as friends.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

12. Students who have had DARE are more able to resist peer pressure to do something wrong than are students who have not had DARE.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

13. DARE teaches students ways to handle stress without taking drugs.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

14. Most students who graduate from DARE believe that taking illegal drugs can damage their health.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

15. DARE helps students to resist what they see or read in the media (e.g., TV, music, magazines, movies) that might influence some people to take drugs or commit violence.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

***Part C**. Each of the following questions requires you to answer it in a different way.*

1. Select the three DARE activities that you enjoyed the most. Place a "1" in front of the activity you liked the best, a "2" beside the activity you liked second best, and a "3" beside the activity you liked third best.

_____ watching and discussing videos

_____ role-playing and acting in skits

_____ reading short stories in the DARE book and answering questions

_____ doing other kinds of exercises in the DARE book

_____ working in groups

_____ the DARE box

_____ learning a lot of new words (definitions)

_____ graduation ceremonies

_____ playing the DARE information game, sometimes called *Jeopardy*

_____ presenting the *DARE Report* in class

_____ doing homework assignments

_____ meeting with high school role models

2. Check any of the following purposes of DARE that you think are true for you.

DARE

____ increased my awareness of the dangers of drug abuse, including alcohol and tobacco

____ taught me strategies for avoiding the use of illegal drugs

____ improved the way I feel about myself, my self-esteem

____ taught me how to avoid becoming involved in gangs

____ taught me how to make better choices about what I should to do

____ helped me to understand and to deal with peer pressures to use drugs

____ helped me to think about positive activities that I can do instead of taking drugs

____ improved my willingness to speak up and express myself

____ taught me how to deal with my anger and the anger of others in non-violent ways

____ helped me to understand how I might be influenced by TV, movies, advertisements, and music to accept drug use and violence as acceptable activities

____ taught me how to avoid violent situations by using conflict management skills

____ taught me to consider the consequences of my actions before I act

____ helped me to recognize what stresses me

____ taught me that people need to feel respected and wanted

3. Now that you have completed DARE, which one of the following do you think would make the best DARE teacher?

_____ a police officer

_____ my classroom teacher

_____ the school counselor

_____ the school nurse

4. Circle the words or phrases that best complete the following statements.

During DARE, I (talked to, did not talk to) my parents about it.

During DARE, my friends and I (talked about, did not talk about) it.

I was (very interested, not very interested) in DARE when it was taught to my class.

I think that 17 lessons are (enough, not enough) to teach DARE in Grade 5.

I think that I (understood, did not understand) most of the DARE lessons.

Now that I have completed DARE, I think that I'll (be able, not be able) to say "No" to drugs.

When there's a chance that a situation may become dangerous, I'll (try to use, not try to use) non-violent ways to handle it.

If I knew that my friends were going to do something that would get them into a lot of trouble, I (would, would not) tell my parents or a teacher.

If a crime had been committed and I knew who had done it, I (would, would not) tell the police.

Part D. *Sometimes people like to have a chance to write their opinions or feelings in their own words. In the spaces below you have the opportunity to do this, if you want to.*

1. What do you think was the best part of DARE?

____

____

____

____

2. Was there anything you did not like about DARE?

____

____

____

____

3. If you could, what would you change about DARE?

____

____

____

____

Please check the correct answer for the following:

_____ I attended most of the DARE lessons and received a DARE graduation certificate.

_____ I was not able to attend enough lessons to complete the DARE program.

STUDENT QUESTIONNAIRE
DARE SURVEY

The ***Drug Abuse Resistance Education (DARE)*** *program has been taught in West Vancouver schools for several years. The West Vancouver Police Department and the West Vancouver School Board would like to find out what students who go through the DARE program think about it. It is important, then, that you answer the questions in this survey as truthfully as you can. This survey is anonymous. This means that you will not put your name on the questionnaire, and no one will know how you answered the questions.*

I am a male ____ female _____. I am in Grade 7. My age is _____ years.

Part A *The following questions are answered with either a* ***Yes*** *or a* ***No.***

	Yes	No
1. Do you think that there is a need for a drug abuse education program in your school?	____	____
2. Do you think that there is a need for a drug abuse education program in other schools in West Vancouver?	____	____
3. Do you think that DARE prepares students with the knowledge and skills they need to resist illegal drugs?	____	____
4. Do you think that a uniformed police officer is the right person to teach DARE?	____	____
5. Do you think that your parents are interested in what you learned in DARE?	____	____
6. Do you think there is a need for a program on how to reduce or avoid violence in your school?	____	____
7. Do you think there is a need for a program on how to reduce or avoid violence in other schools in West Vancouver?	____	____
8. Do you think that your teachers think that DARE is worthwhile?	____	____
9. Do you think that your parents think that DARE is worthwhile?	____	____
10. Do you think that most of your friends agree that DARE is a good program for teaching them to avoid drugs and violence?	____	____
11. Do you think that the DARE program should be taught in your school again next year?	____	____
12. Do you think that you are not likely to use drugs because of what you learned in DARE?	____	____

	Yes	No
13. Do you think that DARE or programs like DARE should be taught in grades lower than grade 5?	____	____

***Part B**. Please check whether you **agree** or **disagree** with the following statements. If you agree or disagree strongly, check **Strongly Agree** or **Strongly Disagree**. If you are not sure of your answer, check **Uncertain**.*

1. Students who go through DARE are better able to resist drugs than students who do not.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

2. DARE successfully teaches students how best to avoid violence..

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

3. Students who go through DARE usually have a better opinion of police officers than students who do not.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

4. Most students learn to trust their DARE police officer.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

5. It is easier for students who have had DARE to resist illegal drugs than it is for students who have not had DARE.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

6. Students who have had DARE are more likely to think about the consequences of using drugs than are students who have not had DARE.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

7. DARE helps students to think about suitable ways to avoid violence.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

8. Most West Vancouver police officers are trying to make our community a better and safer place to live.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

9. DARE students are more willing to speak up when they are in an uncomfortable situation than are students who have not had DARE.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

10. Information about drugs that students learn in DARE is true and up-to-date.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

11. Most students who graduate from DARE think of the police as friends.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

12. Students who have had DARE are more able to resist peer pressure to do something wrong than are students who have not had DARE.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

13. DARE teaches students ways to handle stress without taking drugs.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

14. Most students who graduate from DARE believe that taking illegal drugs can damage their health.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

15. DARE helps students to resist what they see or read in the media (e.g., TV, music, magazines, movies) that might influence some people to take drugs or commit violence.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

Part C. *Each of the following questions requires you to answer it in a different way.*

1. Select the three DARE activities that you enjoyed the most. Place a "1" in front of the activity you liked the best, a "2" beside the activity you liked second best, and a "3" beside the activity you liked third best.

_____ watching and discussing videos

_____ role-playing and acting in skits

_____ reading short stories in the DARE book and answering questions

_____ doing other kinds of exercises in the DARE book

_____ working in groups

_____ playing games as *DARE Bingo Buddies* and *DARE Squares*

_____ presenting a report in class

_____ doing homework assignments

_____ meeting with high school role models

2. Check any of the following purposes of DARE that you think are true for you.

DARE

____ increased my awareness of the dangers of drug abuse, including alcohol and tobacco

____ taught me strategies for avoiding the use of illegal drugs

____ improved the way I feel about myself, my self-esteem

____ taught me how to avoid becoming involved in gangs

____ taught me to apply standards of good and appropriate behavior when deciding what to do about something

____ helped me to understand and to deal with peer pressures to use drugs

____ helped me to think about positive activities that I can do instead of taking drugs

____ improved my willingness to speak up and express myself

____ taught me how to deal with my anger and the anger of others in non-violent ways

____ helped me to understand how I might be influenced by TV, movies, advertisements, and music to accept drug use and violence as acceptable activities

____ taught me how to avoid violent situations by using conflict management skills

____ taught me to consider the consequences of my actions before I act

____ helped me to recognize what stresses me

____ helped me to understand the human need for affection, belonging, respect, and feelings of self-worth

____ helped me to understand and accept the need for laws and school codes of acceptable behavior

____ helped me to accept and respect people different from myself

3. Now that you have completed DARE, which one of the following do you think would make the best DARE teacher?

_____ a police officer

_____ a classroom teacher

_____ the school counselor

_____ the school nurse

_____ the CAPP teacher

4. Circle the words or phrases that best complete the following statements.

During DARE, I (talked to, did not talk to) my parents about it.

During DARE, my friends and I (talked about, did not talk about) it.

I was (very interested, not very interested) in DARE when it was taught to my class.

I think that 10 lessons are (enough, not enough) to teach DARE in Grade 7.

I think that I (understood, did not understand) most of the DARE lessons.

Now that I have completed DARE, I think that I'll (be able, not be able) to say "No" to drugs.

When there's a chance that a situation may become dangerous, I'll (try to use, not try to use) non-violent ways to handle it.

If I knew that my friends were going to do something that would get them into a lot of trouble, I (would, would not) tell my parents or a teacher.

If a crime had been committed and I knew who had done it, I (would, would not) tell the police.

Part D. *Sometimes people like to have a chance to write their opinions or feelings in their own words. In the spaces below you have the opportunity to do this, if you want to.*

1. What do you think was the best part of DARE?

____

____

____

____

2. Was there anything you did not like about DARE?

____

____

____

____

3. If you could, what would you change about DARE?

____

____

____

____

Please check the correct answer to the following:

____ I completed the DARE program in Grade 5/6 and received a DARE graduation certificate.

____ I did nor have the DARE program in elementary school.

____ I attended most of the 10 DARE lessons this year.

____ I was not able to attend most of the DARE lessons this year.

DARE GRADUATE QUESTIONNAIRE
DARE SURVEY

*The **Drug Abuse Resistance Education (DARE)** program has been taught in West Vancouver schools now for several years. The West Vancouver Police Department and the West Vancouver School Board would like to find out what students who have been through DARE think about it. As a graduate of DARE, you have had time to think about the program and, perhaps, even to use some of the skills and knowledge you learned in DARE. Your answers to the questions in this survey are important. The survey is anonymous. You will not have to put your name on the questionnaire, and no one will know how you answered the questions.*

I am a male _____ female _____ Age _______ years Grade 6

Part A** The following questions are answered with either a **Yes** or a **No.

	Yes	**No**
1. Do you think that it is necessary to offer a drug abuse education program in grade 5?	____	____
2. Do you think that students in Grade 5 are old enough and mature enough to profit from a program such as DARE?	____	____
3. Do you think that DARE prepares students with the knowledge, skills, and attitudes they need to resist illegal drugs as children?	____	____
4. Do you think that the DARE program taught in elementary school adequately prepares students to resist drugs in high school?	____	____
5. Do you think that what is learned in DARE helps students to avoid or resist violence?	____	____
6. Do you think that a uniformed police officer is the right person to teach a drug resistance and violence avoidance program?	____	____
7. Do you think that most of your friends now think that DARE is a good program for teaching students avoid drugs and violence?	____	____
8. Do you think that DARE should continue to be taught in West Vancouver elementary schools?	____	____
9. Do you think that you are not likely to use drugs because of what you learned in DARE?	____	____
10. Do you think that 17 lessons are enough for teaching the skills and strategies required for saying "No" to illegal drug use?	____	____
11. Do you think that violence avoidance and resistance can be taught satisfactorily in the amount of time it's covered in DARE?	____	____

The questions you just answered refer to the DARE program. Here are some questions that are more personal. The answers are important to the survey. Remember, no one will know your response to these questions. In fact, neither teachers nor DARE officers will not see completed questionnaires.

Yes **No**

11. Since you graduated from DARE have you been in a situation where you had an opportunity to use drugs (including alcohol)? ____ ____

12. Did you use what you had learned in DARE to resist these drugs? ____ ____

If you answered "NO" to this question, check the phrase or phrases below that best explain(s) why you did not use what you had learned in DARE. If the answer is not here, please write it briefly on the line left for that purpose.

_____ I wanted to take the drugs, drink the alcohol, etc.

_____ I didn't want to be rejected by my friends.

_____ I thought that what I had learned in DARE would not work.

_____ I though I might appear be foolish and be made fun of.

(write a response) ____

____

13. Since you graduated from DARE have you been in a situation where there was the likelihood of violence? **Yes** ____ **No** ____

14. Did you use what you had learned in DARE to stop or avoid the violence? ____ ____

If you answered "NO" to this question, check the phrase or phrases below that best explain(s) why you did not use what you had learned in DARE. If the answer is not here, please write it briefly on the line left for that purpose.

_____ I didn't want to be seen to be afraid.

_____ I didn't want to let my friends down.

_____ I didn't have time to think about what I had learned in DARE.

_____ I thought that what I had learned in DARE would not work.

_____ I enjoy a chance to fight.

(write a response) ____

____

***Part B**. Please check whether you **agree** or **disagree** with the following statements. If you agree or disagree **strongly**, check **Strongly Agree** or **Strongly Disagree**. If you are not sure of your answer, check **Uncertain**.*

1. Students who go through DARE are better able to resist drugs than students who do not.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

2. DARE successfully teaches students how best to avoid violence..

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

3. Students who go through DARE usually have a better opinion of police officers than students who do not.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

4. Most students learn to trust their DARE police officer.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

5. It is easier for students who have had DARE to resist illegal drugs than it is for students who have not had DARE.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

6. Students who have had DARE are more likely to think about the consequences of using drugs than are students who have not had DARE.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

7. DARE helps students to think about suitable ways to avoid violence.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

8. Most West Vancouver police officers are trying to make our community a better and safer place to live.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

9. DARE students are more willing to speak up when they are in an uncomfortable situation than are students who have not had DARE.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

10. Information about drugs that students learn in DARE is true and up-to-date

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

11. Most students who graduate from DARE think of the police as friends.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

12. Students who have had DARE are more able to resist peer pressure to do something wrong than students who have not had DARE.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

13. DARE teaches students ways to handle stress without taking drugs.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

14. Most students who graduate from DARE believe that taking illegal drugs can damage their health.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

15. DARE helps students to resist what they see, hear, or read in the media (e.g., TV, music, magazines, movies) that might influence some people to take drugs or commit violence.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

Part C. *Please check each of the following purposes of DARE that* ***you think are true for you at this time****. Please do not check statements simply because you know that they are DARE objectives.*

1. DARE

____ increased my awareness of the dangers of drug abuse, including alcohol and tobacco

____ taught me strategies for avoiding the use of illegal drugs

____ improved the way I feel about myself, my self-esteem

____ taught me how to avoid becoming involved in gangs

____ taught me how to make better choices about what I should to do

____ helped me to understand and to deal with peer pressures to use drugs

____ helped me to think about positive activities that I can do instead of taking drugs

____ improved my willingness to speak up and express myself

____ taught me how to deal with my anger and the anger of others in non-violent ways

____ helped me to understand how TV, movies, advertisements, and music might influence me to accept drug use and violence as acceptable activities

____ taught me how to avoid violent situations by using conflict management skills

____ taught me to consider the consequences of my actions

____ helped me to recognize what stresses me

____ taught me that people need to feel respected and wanted

2. Now that you have completed DARE, which one of the following do you think would make the best DARE teacher?

_____ a police officer

_____ my classroom teacher

_____ the school counselor

_____ the school nurse

______________________________ (another person?)

Part D. *Sometimes people like to have a chance to write their opinions or feelings in their own words. In the spaces below you have the opportunity to do this, if you want to.*

1. What do you think was the best part of DARE?

2. Was there anything you did not like about DARE?

3. If you could, what would you change about DARE?

Please check the correct answer to the following:

____ I completed the DARE program in Grade 5/6

____ I did not complete the DARE program in Grade 5/6.

Thanks for completing this questionnaire. Your responses will be considered carefully and will be of interest to both the West Vancouver Police Department and the School Board.

DARE GRADUATE QUESTIONNAIRE
DARE SURVEY

The ***Drug Abuse Resistance Education (DARE)*** *program has been taught in West Vancouver schools now for several years. The West Vancouver Police Department and the West Vancouver School Board would like to find out what students who have been through DARE think about it. As a graduate of DARE, you have had time to think about the program and, perhaps, even to use some of the skills and knowledge you learned in DARE. Your answers to the questions in this survey are important. The survey is anonymous. You will not have to put your name on the questionnaire, and no one will know how you answered the questions.*

I am a male _____ female _____ Age _______ years Grade 8

Part A *The following questions are answered with either a* ***Yes*** *or a* ***No.***

	Yes	No
1. Do you think that it is necessary to offer a drug abuse education program in grade 5?	____	____
2. Do you think that students in Grade 5 are old enough and mature enough to profit from a program such as DARE?	____	____
3. Do you think that DARE prepares students with the knowledge, skills, and attitudes they need to resist illegal drugs as children?	____	____
4. Do you think that the DARE program taught in elementary school adequately prepares students to resist drugs in high school?	____	____
5. Do you think that what is learned in DARE helps students to avoid or resist violence?	____	____
6. Do you think that a uniformed police officer is the right person to teach a drug resistance and violence avoidance program?	____	____
7. Do you think that most of your friends now think that DARE is a good program for teaching students avoid drugs and violence?	____	____
8. Do you think that DARE should continue to be taught in West Vancouver elementary schools?	____	____
9. Do you think that you are not likely to use drugs because of what you learned in DARE?	____	____
10. Do you think that the number of DARE lessons you had are enough for teaching the skills and strategies required for saying "No" to illegal drug use?	____	____
11. Do you think that violence avoidance and resistance can be taught satisfactorily in the amount of time it's covered in DARE?	____	____

The questions you just answered refer to the DARE program. Here are some questions that are more personal. The answers are important to the survey. Remember, no one will know your response to these questions. In fact, neither teachers nor DARE officers will not see completed questionnaires.

	Yes	**No**
11. Since you graduated from DARE have you been in a situation where you had an opportunity to use drugs (including alcohol)?	____	____
12 Did you use what you had learned in DARE to resist these drugs?	____	____

If you answered "NO" to this question, check the phrase or phrases below that best explain(s) why you did not use what you had learned in DARE. If the answer is not here, please write it briefly on the line left for that purpose.

_____ I wanted to take the drugs, drink the alcohol, etc.

_____ I didn't want to be rejected by my friends.

_____ I thought that what I had learned in DARE would not work.

_____ I though I might appear be foolish and be made fun of.

(write a response) ____

____

	Yes	**No**
13. Since you graduated from DARE have you been in a situation where there was the likelihood of violence?	____	____
14. Did you use what you had learned in DARE to stop or avoid the violence?	____	____

If you answered "NO" to this question, check the phrase or phrases below that best explain(s) why you did not use what you had learned in DARE. If the answer is not here, please write it briefly on the line left for that purpose.

_____ I didn't want to be seen to be afraid.

_____ I didn't want to let my friends down.

_____ I didn't have time to think about what I had learned in DARE.

_____ I thought that what I had learned in DARE would not work.

_____ I enjoy a chance to fight.

(write a response) ____

***Part B**. Please check whether you **agree** or **disagree** with the following statements. If you agree or disagree **strongly**, check **Strongly Agree** or **Strongly Disagree**. If you are not sure of your answer, check **Uncertain**.*

1. Students who go through DARE are better able to resist drugs than students who do not.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

2. DARE successfully teaches students how best to avoid violence..

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

3. Students who go through DARE usually have a better opinion of police officers than students who do not.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

4. Most students learn to trust their DARE police officer.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

5. It is easier for students who have had DARE to resist illegal drugs than it is for students who have not had DARE.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

6. Students who have had DARE are more likely to think about the consequences of using drugs than are students who have not had DARE.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

7. DARE helps students to think about suitable ways to avoid violence.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

8. Most West Vancouver police officers are trying to make our community a better and safer place to live.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

9. DARE students are more willing to speak up when they are in an uncomfortable situation than are students who have not had DARE.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

10. Information about drugs that students learn in DARE is true and up-to-date.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

11 Most students who graduate from DARE think of the police as friends.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

12. Students who have had DARE are more able to resist peer pressure to do something wrong than students who have not had DARE.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

13. DARE teaches students ways to handle stress without taking drugs.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

14. Most students who graduate from DARE believe that taking illegal drugs can damage their health.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

15. DARE helps students to resist what they see, hear, or read in the media (e.g., TV, music, magazines, movies) that might influence some people to take drugs or commit violence.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

Part C. Please check each of the following purposes of DARE that ***you think are true for you at this time****. Please do not check statements simply because you know that they are DARE objectives.*

1. DARE

____ increased my awareness of the dangers of drug abuse, including alcohol and tobacco

____ taught me strategies for avoiding the use of illegal drugs

____ improved the way I feel about myself, my self-esteem

____ taught me how to avoid becoming involved in gangs

____ taught me to apply standards of good and appropriate behavior when deciding what to do about something

____ helped me to understand and deal with peer pressures to use drugs

____ helped me to think about positive activities that I can do instead of taking drugs

____ improved my willingness to speak up and express myself

____ taught me how to deal with my anger and the anger of others in non-violent ways

____ helped me to understand the various influences (e.g., peers, media) that may pressure me to use drugs

____ taught me how to avoid violent situations by using conflict management skills

____ taught me to consider the consequences of my actions before I act

____ helped me to recognize what stresses me

____ helped me to understand the human need for affection, belonging, respect, and feelings of self-worth

____ helped me to understand and accept the need for laws and school codes of acceptable behavior

____ helped me to accept and respect people different from myself

2. Now that you have completed DARE, which one of the following do you think would make the best DARE teacher?

_____ a police officer, _____ the school counselor, _____ the CAPP teacher

_____ a classroom teacher, _____ the school nurse

______________________________ (another person?)

Part D. *Sometimes people like to have a chance to write their opinions or feelings in their own words. In the spaces below you have the opportunity to do this, if you want to.*

1. What do you think was the best part of DARE?

____

____

____

____

2. Was there anything you did not like about DARE?

____

____

____

____

3. If you could, what would you change about DARE?

____

____

____

Please check the correct answer to the following:

I completed the DARE program in Grade 5/6. **Yes** ____ **No** ____

I attended most of the DARE lessons in Grade 7. **Yes** ____ **No** ____

Thanks for completing this questionnaire. Your responses will be considered carefully and will be of interest to both the West Vancouver Police Department and the School Board.

TEACHER QUESTIONNAIRE (Grade 5/6)
DARE SURVEY

The ***Drug Abuse Resistance Education (DARE)*** *program has been taught in West Vancouver schools now for several years. As part of an overall evaluation of this program, the West Vancouver Police Department and the West Vancouver School Board would like to assess the opinions of teachers whose students are enrolled in DARE concerning the general efficacy of DARE as a drug resistance and violence avoidance education program. Teachers' opinions pertaining to instructional matters are also solicited. This survey is a anonymous. Questionnaires will be returned to the project director, and the results of the survey will be reported by grade level (not by school), with no attempt made to identify individual respondents. Your opinion is important.*

Part A. *The following questions require only a* ***Yes*** *or* ***No*** *response.*

	Yes	**No**
1. Do you think that a drug resistance program is necessary in your school?	____	____
2. Do you think a drug resistance program is necessary in West Vancouver schools?	____	____
3. Do you think that a violence avoidance program is necessary in your school?	____	____
4. Do you think that a violence avoidance program is necessary in West Vancouver schools?	____	____
5. Do you think that the 17 hours required for DARE in Grade 5 is an acceptable use of class time?	____	____
6. Whether due to DARE or not, as the program progressed did you notice an increased ability and willingness in your students to work cooperatively? with their classmates?	____	____
7. Do you think that the amount of time DARE is taught is Grade 5/6 is enough to achieve most of the objectives of the program?	____	____
8. Do you think that your students' attitudes toward law enforcement and the police have been positively affected by DARE?	____	____
9. Do you think that most of the other teachers—including those whose students did not have DARE—support DARE?	____	____
10. Do you think that DARE should be taught in your school again next year?	____	____

***Part B**. Please check whether you **agree, strongly agree, disagree**, or **strongly disagree** with the following statements. If you are undecided, check **Uncertain**.*

1. The objectives of the DARE lessons were clear to my students.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
_____	_____	_____	_____	_____

2. The DARE instructor established a good rapport with my students.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
_____	_____	_____	_____	_____

3. Most DARE lessons were presented in an effective manner.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
_____	_____	_____	_____	_____

4. The strategies used to teach DARE were appropriate for achieving the objectives of the program.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
_____	_____	_____	_____	_____

5. The materials used in the DARE were age-appropriate for Grade 5/6 students.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
_____	_____	_____	_____	_____

6. The materials used in DARE were appropriate for achieving the objectives of the program.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
_____	_____	_____	_____	_____

7. The content of DARE was suitable for my Grade 5/6 students.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
_____	_____	_____	_____	_____

8. Most of my students seemed to have enjoyed DARE.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
_____	_____	_____	_____	_____

9. The parents of my students supported DARE .

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
_____	_____	_____	_____	_____

10. DARE would be more effective with my students if the curriculum were more flexible.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
_____	_____	_____	_____	_____

Part C. *To what extent do you think that each of the following objectives of DARE were achieved in your classroom? If you think that you do not have enough evidence for a proper response, please check "Uncertain."*

1. An awareness of the dangers of drug abuse

Not at all	For a few	For more than a few students	For many students	For most students	For all students	Uncertain
_____	_____	_____	_____	_____	_____	_____

2. Strategies for avoiding illegal drugs, including alcohol and tobacco.

Not at all	For a few	For more than a few students	For many students	For most students	For all students	Uncertain
_____	_____	_____	_____	_____	_____	_____

3. A negative attitude toward illegal drug use.

Not at all	For a few	For more than a few students	For many students	For most students	For all students	Uncertain
_____	_____	_____	_____	_____	_____	_____

4. Strategies for avoiding violence

Not at all	For a few	For more than a few students	For many students	For most students	For all students	Uncertain
_____	_____	_____	_____	_____	_____	_____

5. An ability to assess the consequences of one's choices

Not at all	For a few	For more than a few students	For many students	For most students	For all students	Uncertain
_____	_____	_____	_____	_____	_____	_____

6. Ways of managing stress without resorting to drugs

Not at all	For a few	For more than a few students	For many students	For most students	For all students	Uncertain
_____	_____	_____	_____	_____	_____	_____

7. A knowledge of positive alternatives to drug use

Not at all	For a few	For more than a few students	For many students	For most students	For all students	Uncertain
_____	_____	_____	_____	_____	_____	_____

8. Assertiveness skills and the willingness to use them

Not at all	For a few	For more than a few students	For many students	For most students	For all students	Uncertain
_____	_____	_____	_____	_____	_____	_____

9. Increased self-esteem

Not at all	For a few	For more than a few students	For many students	For most students	For all students	Uncertain
_____	_____	_____	_____	_____	_____	_____

10. An ability to resist negative peer pressure

Not at all	For a few	For more than a few students	For many students	For most students	For all students	Uncertain
_____	_____	_____	_____	_____	_____	_____

Are there any of the above that you do not think should be objectives of a drug abuse and violence avoidance school program?

_____ Yes there are. I object to #'s ______________________________(above)

_____ No, I accept them all as being valid objectives.

_____ I think that other objectives that should be added are the following: ______

____

____

____

***Part D**. Responses to the following questions differ in the way they are recorded.*

1. Do you think that a uniformed police officer is the appropriate person to teach DARE?

_____ **Yes**, I do. _____ **No**, I do not.

If you checked "No" above, who do you think is the best person to teach a program such as DARE?

____ the classroom teacher, ____ the school counselor, ____ the school nurse

(another person?) ______________________________________

2. By what age and grade do you think a child in West Vancouver may encounter illegal drugs and violence?

   illegal drugs may be encountered by age ______ and grade _____

   violence may be encountered by age ______ and grade ______

   What is the youngest age _______ and earliest grade ________ that you think children should receive instruction in drug abuse and violence avoidance education?

3. Which of the following describe your activities while the DARE instructor was in your classroom?

   _____ I moved about the class assisting where I was needed.

   _____ I assisted with class management when required.

   _____ I turned the class over to the DARE instructor and tried to remain as unobtrusive as possible.

   _____ I let the DARE instructor take charge and I left the room.

   _____ I used the time for housekeeping (marking assignments, lesson-planning, etc.) activities.

   Please place a check by the phrase that best describes the number of periods you spent in the classroom during DARE lessons.

   ____ every period, ____ most periods, ____ about half the periods,

   ____ less than half the periods, ____ very few periods, ____ none

4. As briefly as possible, describe what you see as being the role of the classroom teacher in the DARE program.

____

____

____

____

____

5. What changes, if any, would you make in the DARE program taught in your school?

____

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____

____

____

6. Overall, how would you rate the effectiveness of DARE as a drug abuse and violence resistance program?

As a drug abuse program:

____ excellent, ____ very good, ____ good, ____ adequate, ____ fair, ____poor

As a violence resistance program:

____ excellent, ____ very good, ____ good, ____ adequate, ____ fair, ____poor

TEACHER QUESTIONNAIRE (Grade 7)
DARE SURVEY

*The **Drug Abuse Resistance Education (DARE)** program has been taught in West Vancouver schools now for several years. As part of an overall evaluation of this program, the West Vancouver Police Department and the West Vancouver School Board would like to assess the opinions of teachers whose students are enrolled in DARE concerning the general efficacy of DARE as a drug resistance and violence avoidance education program. Teachers' opinions pertaining to instructional matters are also solicited. This survey is a anonymous. Questionnaires will be returned to the project director, and the results of the survey will be reported by grade level (not by school), with no attempt made to identify individual respondents. Your opinion is important.*

Part A. *The following questions require only a **Yes** or **No** response.*

Yes No

1. Do you think that a drug resistance program is necessary in your school? ____ ____
2. Do you think a drug resistance program is necessary in West Vancouver schools? ____ ____
3. Do you think that a violence avoidance program is necessary in your school? ____ ____
4. Do you think that a violence avoidance program is necessary in West Vancouver schools? ____ ____
5. Do you think that the 10 hours required for DARE in Grade 7 is an acceptable use of class time? ____ ____
6. Whether due to DARE or not, as the program progressed did you notice an increased ability and willingness in your students to work cooperatively? with their classmates? ____ ____
7. Do you think that the amount of time DARE is taught in Grade 7 is enough to achieve most of the objectives of the program? ____ ____
8. Do you think that your students' attitudes toward law enforcement and the police have been positively affected by DARE? ____ ____
9. Do you think that most of the other teachers—including those whose students did not have DARE—support DARE? ____ ____
10. Do you think that DARE should be taught in your school again next year? ____ ____

Part B. *Please check whether you* ***agree, strongly agree, disagree,*** *or* ***strongly disagree*** *with the following statements. If you are undecided, check* ***Uncertain.***

1. The objectives of the DARE lessons were clear to my students.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
_____	_____	_____	_____	_____

2. The DARE instructor established a good rapport with my students.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
_____	_____	_____	_____	_____

3. Most DARE lessons were presented in an effective manner.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
_____	_____	_____	_____	_____

4. The strategies used to teach DARE were appropriate for achieving the objectives of the program.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
_____	_____	_____	_____	_____

5. The materials used in the DARE were age-appropriate for Grade 7 students.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
_____	_____	_____	_____	_____

6. The materials used in DARE were appropriate for achieving the objectives of the program.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
_____	_____	_____	_____	_____

7. The content of DARE was suitable for my Grade 7 students.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
_____	_____	_____	_____	_____

8. Most of my students seemed to have enjoyed DARE.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
_____	_____	_____	_____	_____

9. The parents of my students supported DARE .

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
_____	_____	_____	_____	_____

10. DARE would be more effective with my students if the curriculum were more flexible.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
_____	_____	_____	_____	_____

Part C. *To what extent do you think that each of the following objectives of DARE were achieved in your classroom? If you think that you do not have enough evidence for a proper response, please check* ***Uncertain.***

1. An awareness of the dangers of drug abuse

Not at all	For a few	For more than a few students	For many students	For most students	For all students	Uncertain
_____	_____	_____	_____	_____	_____	_____

2. Strategies for avoiding illegal drugs, including alcohol and tobacco.

Not at all	For a few	For more than a few students	For many students	For most students	For all students	Uncertain
_____	_____	_____	_____	_____	_____	_____

3. A negative attitude toward illegal drug use.

Not at all	For a few	For more than a few students	For many students	For most students	For all students	Uncertain
_____	_____	_____	_____	_____	_____	_____

4. Strategies for avoiding violence

Not at all	For a few	For more than a few students	For many students	For most students	For all students	Uncertain
_____	_____	_____	_____	_____	_____	_____

5. An ability to assess the consequences of one's choices

Not at all	For a few	For more than a few students	For many students	For most students	For all students	Uncertain
_____	_____	_____	_____	_____	_____	_____

6. Ways of managing stress without resorting to drugs

Not at all	For a few	For more than a few students	For many students	For most students	For all students	Uncertain
_____	_____	_____	_____	_____	_____	_____

7. A knowledge of positive alternatives to drug use

Not at all	For a few	For more than a few students	For many students	For most students	For all students	Uncertain
_____	_____	_____	_____	_____	_____	_____

8. Assertiveness skills and the willingness to use them

Not at all	For a few	For more than a few students	For many students	For most students	For all students	Uncertain
_____	_____	_____	_____	_____	_____	_____

9. Increased self-esteem

Not at all	For a few	For more than a few students	For many students	For most students	For all students	Uncertain
_____	_____	_____	_____	_____	_____	_____

10. An ability to resist negative peer pressure

Not at all	For a few	For more than a few students	For many students	For most students	For all students	Uncertain
_____	_____	_____	_____	_____	_____	_____

11. Respect for diversity in individuals

Not at all	For a few	For more than a few students	For many students	For most students	For all students	Uncertain
_____	_____	_____	_____	_____	_____	_____

12. An understanding and acceptance of the need for laws and standards of acceptable behavior

Not at all	For a few	For more than a few students	For many students	For most students	For all students	Uncertain
_____	_____	_____	_____	_____	_____	_____

Are there any of the above that you do not think should be objectives of a drug abuse and violence avoidance school program?

_____ Yes there are. I object to #'s ______________________________(above)

_____ No, I accept them all as being valid objectives.

_____ I think that other objectives that should be added are the following: _______

____

____

____

***Part D**. Responses to the following questions differ in the way they are recorded.*

1. Do you think that a uniformed police officer is the appropriate person to teach DARE?

_____ **Yes**, I do. _____ **No**, I do not.

If you checked "No" above, who do you think is the best person to teach a program such as DARE?

____ the classroom teacher, ____ the school counselor, ____ the school nurse

(another person?) ________________________________

2. By what age and grade do you think a child in West Vancouver may encounter illegal drugs and violence?

illegal drugs may be encountered by age ______ and grade _____

violence may be encountered by age ______ and grade ______

What is the youngest age _______ and earliest grade ________ that you think children should receive instruction in drug abuse and violence avoidance education?

3. Which of the following describe your activities while the DARE instructor was in your classroom?

_____ I moved about the class assisting where I was needed.

_____ I assisted with class management when required.

_____ I turned the class over to the DARE instructor and tried to remain as unobtrusive as possible.

_____ I let the DARE instructor take charge and I left the room.

_____ I used the time for housekeeping (marking assignments, lesson-planning, etc.) activities.

Please place a check by the phrase that best describes the number of periods you spent in the classroom during DARE lessons.

____ every period, ____ most periods, ____ about half the periods,

____ less than half the periods, ____ very few periods, ____ none

4. As briefly as possible, describe what you see as being the role of the classroom teacher in the DARE program.

____

____

____

____

5. What changes, if any, would you make in the DARE program taught in your school?

____

____

____

____

____

6. Overall, how would you rate the effectiveness of DARE as a drug abuse and violence resistance program?

As a drug abuse program:

____ excellent, ____ very good, ____ good, ____ adequate, ____ fair, ____poor

As a violence resistance program:

____ excellent, ____ very good, ____ good, ____ adequate, ____ fair, ____poor

PARENT QUESTIONNAIRE
DARE SURVEY

The ***Drug Abuse Resistance Education (DARE)*** *program has been taught in West Vancouver now for several years. The West Vancouver Police Department and the West Vancouver School Board would like to assess parents' attitudes toward this program. As the parent of a recent DARE graduate, your opinion of DARE is important to this assessment. We would, therefore, appreciate your responses to the items in this questionnaire. The survey is anonymous. No attempt will be made to identify individual respondents. Completed questionnaires are returned to the project director.*

I am the parent/guardian of a _____________ (boy, girl) presently enrolled in the Grade 5/6 DARE program.

Part A. *The following questions require only a* ***Yes*** *or* ***No*** *response.*

	Yes	No
1. Do you think that a drug resistance program is necessary in your child's school?	____	____
2. Do you think that a drug resistance program is necessary in West Vancouver schools.	____	____
3. Do you think that a violence avoidance program is necessary in your child's school?	____	____
4. Do you think that a violence avoidance program is necessary in West Vancouver schools?	____	____
5. Beyond the initial letter from DARE introducing the program, did your child discuss DARE lessons or exercises with you at home?	____	____

If the answer to this question is "Yes," who usually initiated the discussion?
A parent ____, my child ______

6. Have you attended a Dare parent meeting in which a police officer was present?	____	____

If your response to the above question is "no," please check the answer below that most closely explains why you did not attend such a meeting.

_____ No meeting was called.

_____ I learned about it too late to attend.

_____ I was busy and could not attend.

_____ I did not care to attend.

_____ I already knew enough about the DARE program.

7. Would you attend an "orientation to DARE" workshop offered by the DARE officer in your child's school?	____	____

If your response to this question is "no," please check the answer below that most closely explains why.

_____ I'm too busy.

_____ I'm just not interested.

_____ I already know about DARE.

8. Do you know enough about DARE that you could describe it to another parent? ____ ____

9. Do you think that your child's attitude toward the police improved as a result of DARE? ____ ____

10. Do you think that the 17 hours required for DARE is an acceptable use of class time? ____ ____

11. Do you think that because of DARE your child is more likely to go to the police in time of need? ____ ____

12. Do you think that most parents (or at least the ones with whom you have spoken) support DARE? ____ ____

13. Do you recommend that DARE in its present form be continued in West Vancouver schools? ____ ____

Part B. *Please state whether you* ***agree*** *or* ***disagree*** *with the following statements. If you agree or disagree* ***strongly****, check* ***Strongly Agree*** *or* ***Strongly Disagree****. If you are not certain of your response, check* ***Uncertain.***

1. As a result of DARE, my child is now better able to resist illegal drugs (including alcohol and tobacco).

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
_____	_____	_____	_____	_____

2. DARE successfully teaches children how to avoid violence.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
_____	_____	_____	_____	_____

3. As a result of DARE, it is easier for me to talk to my child about drugs and drug use.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
_____	_____	_____	_____	_____

4. I agree, at least generally, with the way DARE is taught?

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
_____	_____	_____	_____	_____

5. I agree with the use of the DARE materials I have seen or heard about from my child.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
_____	_____	_____	_____	_____

Part C *The following questions differ in the way responses are recorded.*

1. Do you think that the grade in which your child was enrolled this year was an appropriate age for your him or her to receive instruction in drug resistance and violence avoidance?

_____ Yes, I do.

_____ No, I do not. I think that this kind of instruction should be given (in earlier grades, in later grades) __________________ beginning with grade ________.

2. By what age and grade do you think a child in West Vancouver may encounter illegal drugs and violence?

illegal drugs may be encountered by age_________ and grade ______

violence may be encountered by age __________ and grade _______

3. The following are objectives of programs similar to DARE. Place a check by those that you think should be DARE objectives also.

_____ making students aware of the dangers of drug abuse

_____ helping students to understand the consequences of their choices

_____ building student self-esteem

_____ providing students with ways to resist drug use

_____ developing assertiveness skills in students

_____ providing students with positive ways to manage stress

_____ encouraging students to select positive alternatives to drug use.

_____ developing decision-making skills in students

_____ helping students to understand peer and media pressure that might lead to drug use

_____ teaching students strategies for avoiding violence

_____ teaching students ways to deal with their own anger and the anger of others

4. Who do you think should teach a program such as DARE?

In the elementary grades?	In the secondary grades?
_____ a police officer	_____ a police officer
_____ the classroom teacher	_____ the school counselor
_____ the school counselor	_____ the school nurse
_____ the school nurse	
(another person?) _________	(another person?) _________

5. What changes, if any, would you like to see in DARE?

6. In the space below (or on an attached page if additional space is required), please state any opinions you would like to express about DARE.

Thank you for responding to this survey. Your answers will be carefully considered. Should you have any questions or concerns about this questionnaire or any items in it, you may contact the project director, Dr. Charles K. Curtis, at 925-5199.

PARENT QUESTIONNAIRE
DARE SURVEY

The ***Drug Abuse Resistance Education (DARE)*** *program has been taught in West Vancouver now for several years. The West Vancouver Police Department and the West Vancouver School Board would like to assess parents' attitudes toward this program. As the parent of a recent DARE graduate, your opinion of DARE is important to this assessment. We would, therefore, appreciate your responses to the items in this questionnaire. The survey is anonymous. No attempt will be made to identify individual respondents. Completed questionnaires are returned to the project director.*

I am the parent/guardian of a ______________ (boy, girl) presently enrolled in the Grade 7 DARE program.

Part A. *The following questions require only a* ***Yes*** *or* ***No*** *response.*

Yes **No**

1. Do you think that a drug resistance program is necessary in your child's school? ____ ____
2. Do you think that a drug resistance program is necessary in West Vancouver schools? ____ ____
3. Do you think that a violence avoidance program is necessary in your child's school? ____ ____
4. Do you think that a violence avoidance program is necessary in West Vancouver schools? ____ ____
5. Beyond the initial letter from DARE introducing the program, did your child discuss DARE lessons or exercises with you at home? ____ ____

   If the answer to this question is "Yes," who usually initiated the discussion?
   A parent ____, my child ______

6. Have you attended a Dare parent meeting in which a police officer was present? ____ ____

   If your response to the above question is "no," please check the answer below that most closely explains why you did not attend such a meeting.

   _____ No meeting was called.
   _____ I was busy and could not attend.
   _____ I already knew enough about the DARE program.
   _____ I learned about it too late to attend.
   _____ I did not care to attend.

7. Would you attend an "orientation to DARE" workshop offered by the DARE officer in your child's school? ____ ____

   If your response to this question is "no," please check the answer below that most closely explains why.
   _____ I'm too busy.
   _____ I already know about DARE.
   _____ I'm just not interested.

8. Do you know enough about DARE that you could describe it to another parent? ____ ____

9. Do you think that your child's attitude toward the police improved as a result of DARE? ____ ____

10. Do you think that the 10 hours required for DARE in Grade 7 is an acceptable use of class time? ____ ____

11. Do you think that because of DARE your child is more likely to go to the police in time of need? ____ ____

12. Do you think that most parents (or at least the ones with whom you have spoken) support DARE? ____ ____

13. Do you recommend that DARE in its present form be continued in West Vancouver schools? ____ ____

Part B. *Please state whether you* ***agree*** *or* ***disagree*** *with the following statements. If you agree or disagree* ***strongly****, check* ***Strongly Agree*** *or* ***Strongly Disagree****. If you are not certain of your response, check* ***Uncertain.***

1. As a result of DARE, my child is now better able to resist illegal drugs (including alcohol and tobacco).

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

2. DARE successfully teaches children how to avoid violence.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

3. As a result of DARE, it is easier for me to talk to my child about drugs and drug use.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

4. I agree, at least generally, with the way DARE is taught?

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

5. I agree with the use of the DARE materials I have seen or heard about from my child.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
____	____	____	____	____

***Part C**. The following questions differ in the way responses are recorded.*

1. Do you think that the grade in which your child was enrolled this year was an appropriate age for your him or her to receive instruction in drug resistance and violence avoidance?

_____ Yes, I do.

_____ No, I do not. I think that this kind of instruction should be given (in earlier grades, in later grades) __________________ beginning with grade _______.

2. By what age and grade do you think a child in west Vancouver may encounter illegal drugs and violence?

illegal drugs may be encountered by age_________ and grade ______

violence may be encountered by age __________ and grade _______

3. The following are objectives of programs similar to DARE. Place a check by those that you think should be DARE objectives, also.

_____ making students aware of the dangers of drug abuse

_____ helping students to understand the consequences of their choices

_____ building student self-esteem

_____ providing students with ways to resist drug use

_____ developing assertiveness skills in students

_____ providing students with positive ways to manage stress

_____ encouraging students to select positive alternatives to drug use

_____ developing decision-making skills in students

_____ helping students to understand peer and media pressure that might lead to drug use

_____ teaching students strategies for avoiding violence

_____ encouraging the acceptance of human diversity

_____ teaching students ways to deal with their own anger and the anger of others

_____ helping students to recognize and accept of the need for laws and codes of acceptable behavior.

4. Who do you think should teach a program such as DARE?

In the elementary grades?

_____ a police officer

_____ the classroom teacher

_____ the school counselor

_____ the school nurse

(another person?) _________

In the secondary grades?

_____ a police officer

_____ the school counselor

_____ the school nurse

_____ the CAPP teacher

(another person?) _________

5. What changes, if any, would you like to see in DARE?

6. In the space below (or on an attached page if additional space is required), please state any opinions you would like to express about DARE.

Thank you for responding to this survey. Your answers will be carefully considered. Should you have any questions or concerns about this questionnaire or any items in it, you may contact the project director, Dr. Charles K. Curtis, at 925-5199.

RESEARCH SERVICES INTERNATIONAL
Data Collection, Data Analysis, Reports, Editing
2466 Haywood Avenue
West Vancouver, British Columbia
Canada, V7V 1Y1

April 15, 1999

Dear Parent:

As you are no doubt aware, during the past few months your child was involved in the Drug Abuse Resistance Education (DARE) program taught by specially trained officers of the West Vancouver Police Department. This is the fourth year that this program has been offered in elementary schools in West Vancouver.

Since DARE was introduced into West Vancouver schools in September 1994, almost 2,700 Grade 5 and Grade 7 students have graduated from the program. This year, another 800 students will receive DARE graduation certificates.

Maintaining the DARE program in West Vancouver schools requires the commitment both of manpower resources on the part of the Police Department and classroom hours on the part of the School District, and although informal comments by students suggest the program is well received, a formal systematic assessment has not yet been conducted. Numerous studies have examined students' attitudes toward DARE and how well DARE objectives are achieved; however, none of these studies were conducted in communities similar to West Vancouver.

The attached questionnaire is part of an assessment of the DARE programs taught in West Vancouver schools. Students presently in DARE, their classroom teachers, and last-year's DARE graduates will also be asked to complete questionnaires designed to assess their attitudes toward the DARE program. The responses of each group are important to this assessment, and, therefore, we request that you complete this questionnaire and that your child returns it to the classroom teacher as soon as possible. You are not required to place your name on the questionnaire and anonymity is guaranteed. Completed questionnaires may be returned in the envelopes provided for that purpose.

This survey is being conducted by a retired University of British Columbia professor, without remuneration.

Sincerely,

Dr. Charles K. Curtis